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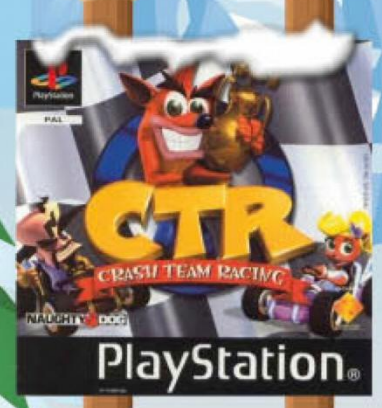

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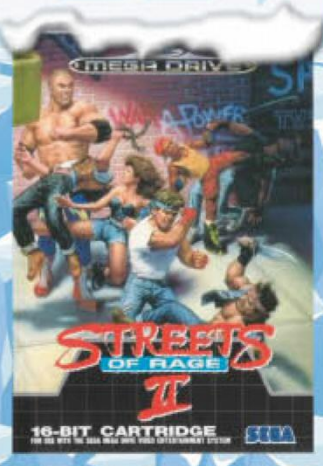

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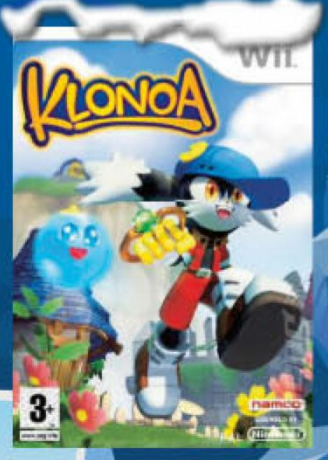

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THE RETROBATES

WHAT'S YOUR FAVOURITE MOMENT FROM A 2D MARIO GAME?

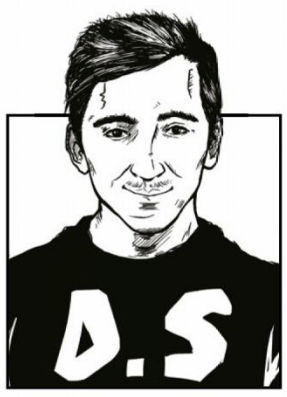
DARRAN JONES

Working on the delicatessen counter at Tesco and listening to my 38-year-old boss excitedly talking about completing *Super Mario Bros 3* while her husband helped her. It made me realise just how big a deal *Mario* actually was.

Expertise:
Juggling a gorgeous wife, two beautiful girls and an award-winning magazine

Currently playing:
Banjo-Kazooie

Favourite game of all time:
Strider



DREW SLEEP

In first school, a friend and I used to sneak to the library and play *Super Mario Land 2* on his Game Boy. It was our first act of rebellion, and it was so worth it!

Expertise:
Office Space-like hatred for the **RG** office printer

Currently playing:
Fire Emblem: Three Houses

Favourite game of all time:
Final Fantasy VIII

NICK THORPE

I've always loved World 4-1 in the original *Super Mario Bros* – there's a real thrill in sprinting right through that stage, perfectly timing jumps over piranha plants, all to avoid Lakitu's Spiny-dropping shenanigans.

Expertise:
Owning five Master Systems (I sold two)

Currently playing:
Sega Ages: Virtua Racing

Favourite game of all time:
Sonic The Hedgehog

ANDY SALTER

The only *Mario* games I've played are *Mario Kart* on the SNES and *Mario Tennis* on the N64. I'm going to go with *Mario Kart*, even though it's not a platformer.

Expertise:
Modding games, no 'vanilla' versions for me, thanks!

Currently playing:
Europa Barbarorum 2 mod for *Medieval II: Total War*

Favourite game of all time:
Rome: Total War

IAIN LEE

When Jumpman would get the hammer in *Donkey Kong*. The power felt amazing!

Expertise:
Buying overpriced stuff on eBay then never touching it

Currently playing:
Way too much *COD* and I would like to stop now please

Favourite game of all time:
Elite (BBC Model B)

MARTYN CARROLL

The submarine level on *Super Mario Land*. Breaking up the platforming with a shooting level was a bold but brilliant move.

Expertise:
Sinclair stuff

Currently playing:
Bubble Bobble 4 Friends

Favourite game of all time:
Jet Set Willy

PAUL ROSE

Entering a cave for the first time in *Super Mario World*. The way they added echo to the sounds blew me away!

Expertise:
Winging it

Currently playing:
Borderlands 3

Favourite game of all time:
Half-Life 2

HARETH AL BUSTANI

Meeting Yoshi for the first time in *Super Mario World* was a game-changer, symbolic of the immense creativity behind the title and the Nintendo team. Plus, my dog is called Yoshi.

Expertise:
Juggling obscure games, words and guitar and seeing where it all lands

Currently playing:
Total War: Three Kingdoms

Favourite game of all time:
The Secret Of Monkey Island

RORY MILNE

When you bag a star power-up in a brick-hard section of *Super Mario Land* and become temporarily invincible – all to the strains of the can-can music! It's both joyful and surreal.

Expertise:
The game that I'm writing about at the time of writing

Currently playing:
Uridium

Favourite game of all time:
Tempest

LOADING...

Has there ever been a platform series that's been as consistently solid as *Super Mario*? In all honesty, I don't think there has been and I've played a lot of different franchises over the years. Granted, Sonic has appeared in some smashing examples and Rayman has given it a good go, but when you consider how few duffers there are in the *Super Mario* series, Nintendo's mustachioed plumber clearly deserves the title of 'Platform Superstar'.

So we thought we'd kick off 2020 by speaking to a number of games developers to find out what makes Nintendo's series so special. The likes of John Romero, Chris Sutherland, Ste Pickford and many others were only too happy to share their memories of Mario's early 2D adventures and to break down why they're so special and influential.

If you're not a fan of *Mario* then don't worry as there's plenty of other great articles to discover, including an exhaustive look at the incoming Spectrum Next, the history behind EA's popular *Strike* series, as well as an examination of what makes a great retro podcast. And if you like what you see be sure to take advantage of our latest subscription offer on page 28.

Enjoy the magazine!

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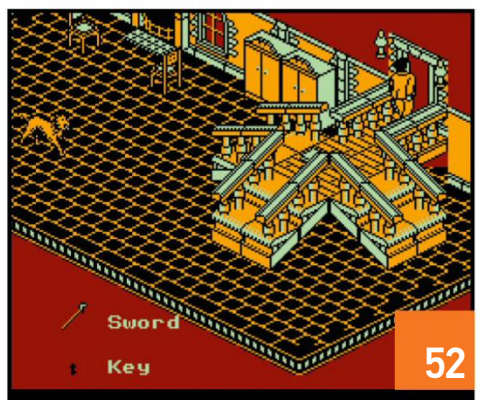

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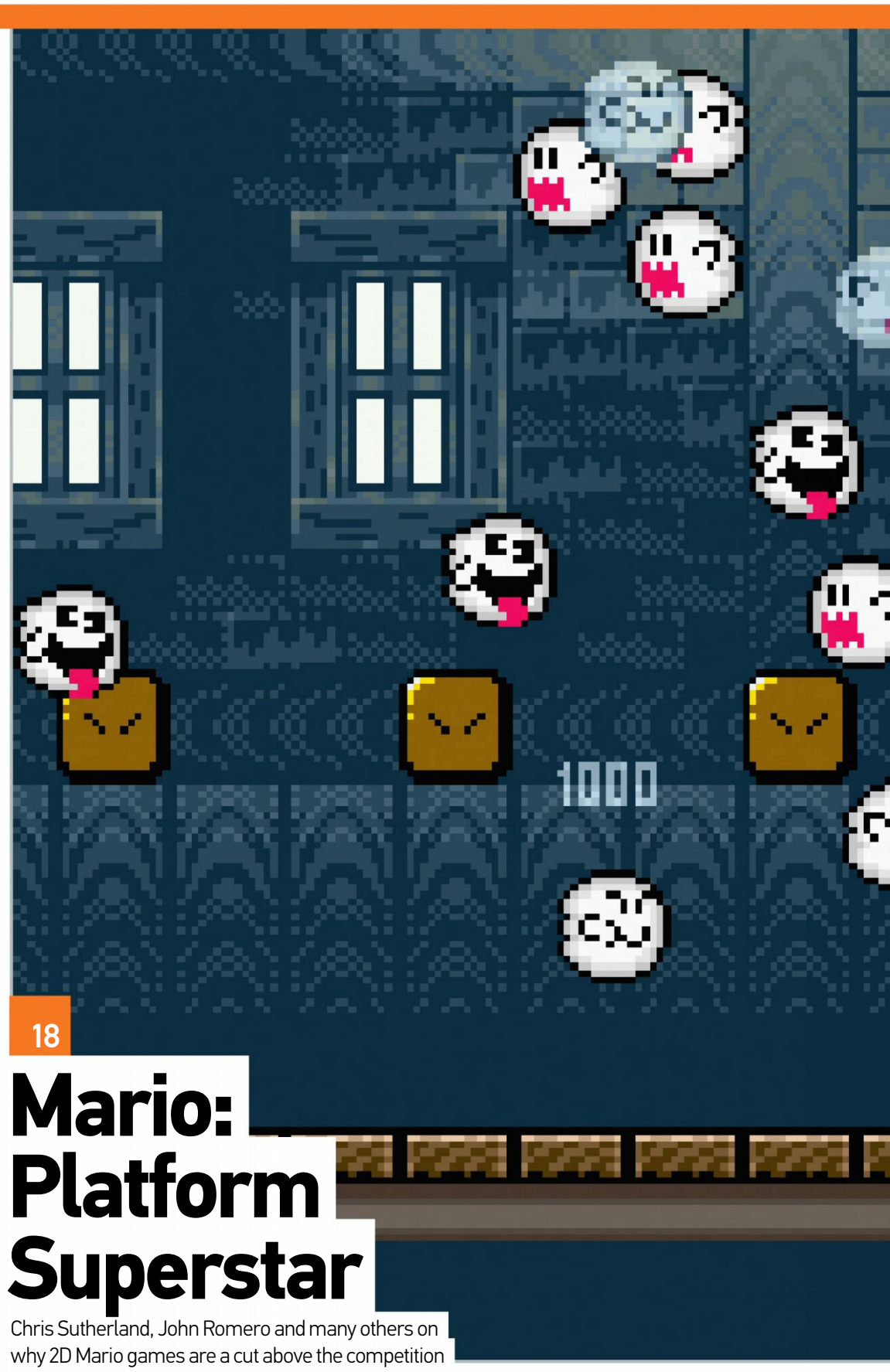

Mario: Platform Superstar
Chris Sutherland, John Romero and many others on why 2D Mario games are a cut above the competition

Ultimate Guide: Marble Madness
Everything you need to know about Atari's incredible isometric arcade hit

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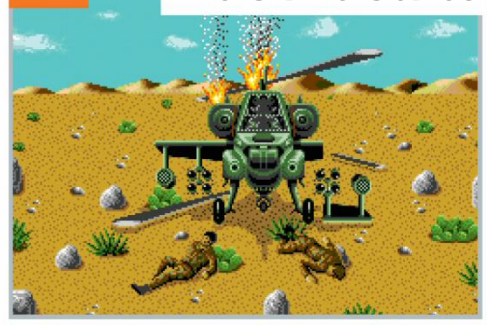

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ARCADE CLUB EXPANDS

Founder Andy Palmer tells us about his brand-new venue

» Andy hopes that classic machines like those seen above will allow Arcade Club Blackpool to capture the spirit of the Eighties arcades the resort once had.

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Paul wants to sit you down and talk to you about the wisdom of Jon Bon Jovi

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Stephen Sharp on his brand-new YouTube show

14 BACK TO THE NOUGHTIES
Nick is once again braving the mists of time. What will he find there?

Arcade Club has been a tremendous success since it first launched in Bury in 2015. The brainchild of Andy Palmer, it has quickly developed a reputation for its exceptional range of classic arcade cabinets, which are incredibly well maintained and encompass virtually every game you can think of. It's become a beacon of the north of England and is currently the biggest arcade in Europe, but Andy isn't one to rest on his laurels.

Early in 2019, Andy opened up an additional venue in Leeds, called Arcade Club Leeds, but it would appear that this isn't going to be the only new location where you can enjoy classic coin-op games from yesteryear, as Andy has recently revealed that a third location will be opening in Blackpool this year. While Blackpool still features plenty of arcades on its beachfront, there's a far greater focus on penny droppers, fruit machines and redemption cabinets, meaning there's ample opportunity for Arcade Club Blackpool to shine.

» Imagine how exciting all of this will look when the power has been turned on. We can't wait to visit.

"I'm incredibly happy about being able to bring back the classics to Blackpool, for me the home of arcades in the Eighties," admits Andy. "I think we'll be a great attraction for Blackpool, complementing the modern arcades with a killer selection of games from over the last four decades!" Considering Blackpool has been the host of countless retro-themed events for a number of years now, it makes sense to see a more permanent collection of classic games there. "I feel it's a natural step for arcade club," continues Andy. "There are many people (my age and older) who long for the games of their youth."

Andy's already noticed this first-hand at the new venue, and it's not even open yet. "Just the looks on the tradesmen's faces when they visit says it all," laughs Andy. "Checking the electronics, lift servicing etc quickly turns into, 'Do you have *Track & Field*?' And, 'Oh my god, you have an *OutRun* deluxe! I used to put all my pocket money in that!' So I think the location is amazing, with thousands of people who lived and breathed arcades during the Eighties and Nineties."

The location is important to Andy and equally crucial is the focus on Arcade Club Blackpool's contents. As a result, it will be a little different to the current venues which have a solid mix of classic machines and newer games, including VR, Japanese curios and PC setups. "Blackpool will have all the classics you'd expect from Arcade Club, but it will differ in a few ways," admits Andy. "They'll be more focus on the classics (at least initially) as I feel that's what's missing from the Blackpool of today. We'll certainly monitor the situation and change things as needed. It also has a full restaurant and a full bar – so that's going to be something new for me to play with."

Anyone who has already visited an Arcade Club will be aware of just how much retro stuff there is to play, from *Pac-Man* and *Donkey Kong*, to *Missile Command*, *Q*bert* and *Space Invaders*. Both the Bury and Leeds branches do a

» The basement of Arcade Club Bury highlights just how many cabinets Andy has access to.

good job of taking you back in time, so we can only imagine how exciting it will be to visit a location with a pure focus on the games of yesterday. "They'll be all the core favourites, so *Track & Field*, *Paperboy*, *Star Wars*, *Defender* etc (times a hundred), but [there will be] also venue-exclusive titles as we have in Leeds and Bury," explains Andy. "So if you went for the £40 monthly pass you will have access to over 800 original machines." It's worth noting as well that the pass Andy is talking about covers you for all three venues, meaning it's potentially excellent value if you live near the current locations.

While Arcade Club's architect hasn't told us whereabouts in Blackpool the new location will be, he has revealed to us that he's spent a long time scouting out a suitable area. He adds that it is a challenge to find an ideal venue that's capable of sourcing the significant power requirements that an attraction like Arcade Club needs. "For me it's got to be an interesting building, in a good location and it must be completely different to the other Arcade Clubs," highlights Andy. "I want people to visit different Arcade Club venues and feel like they're always visiting totally different arcades, just like it used to be."

Arcade Club Blackpool is due to open this year. While we're desperate for a venue down south, a northern focus makes a lot of sense when you consider that cabinets need to be easily maintained, meaning the Bury hub is incredibly important to Arcade Club's overall success. With a third venue in place, we were keen to know from Andy why he thinks Arcade Club has become so popular in such a short space of time. "I ask myself this occasionally," he concludes. "Leeds I felt was a 'risk' as I wasn't 100% sure if Bury was just a blip, and it just happened to work there. Now, though, I feel there is a need for places like Arcade Club. Once you've gone through your teens and early twenties your tastes are set pretty much in stone, you become stuck in a rut (or the Eighties) so Arcade Club gives you this experience in gaming you may not even realise you're missing. This spreads via word of mouth as people start talking about games they've not spoken about for 30 years! It's something special to observe and it's one of the main reasons I love doing this."

» Andy (right, pictured with *The Gadget Show*'s Jason Bradbury) is extremely proud to be opening a third Arcade Club.

"I wasn't 100% sure if Bury was just a blip, and it just happened to work there"

Andy Palmer

JASON BROOKES 1967-2019

FORMER SUPER PLAY WRITER AND EDGE EDITOR PASSES AWAY

It is with great sadness that we report the passing of Jason Brookes, the legendary British games journalist who made his name writing for the fondly remembered SNES magazine *Super Play*. Jason had enjoyed a stellar career, including a lengthy spell editing *Edge,* but he died in December, aged 52, following a three-year battle with prostate cancer.

Tributes from across the gaming industry poured in following the news. Former *Super Play* editor Matt Bielby who hired Jason as a staff writer from issue one in November 1992 tells **Retro Gamer**: "He was a hugely knowledgeable, immensely enthusiastic, endlessly amiable and annoyingly good-looking presence in the *Super Play* office. His personality would settle into an engaging cross between overexcited geek and laid-back sage."

Steve Jarratt, Jason's editor when he joined *Edge* for its launch a year later, praised the writer's deep knowledge of the Japanese games market and Eastern culture while former Future Publishing chief executive Greg Ingham says he was a "highly talented editor who wore his knowledge lightly". Ex-*Guardian* games editor Keith Stewart was given his journalistic break by Jason on *Edge*. "Jason hated waffle. He hated mediocre, colourless writing," Keith recalls of his high standards.

Jason was born in Manchester on 25 May 1967 and, after spells working as a street trader and cocktail barman, he found an outlet for his writing on the console fanzine *Electric Brain*. He applied for a job on Future's newly launched Sega magazine *Mega* but his obvious passion for Nintendo saw him under Matt's wing.

"He'd leave everything to the very last moment, keen to squeeze in the very latest bits of news – but in many ways he was right to do so, as that finger-on-the-Japanese-pulse aspect of *Super Play* became one of the key selling points of the magazine," remembers Matt.

Certainly, 'Jason-time' became a thing on the magazines he worked on, yet they would flourish with him on board. He became editor of *Edge* from issue ten, overseeing a period when it found its feet and voice. He would pack in as many references to clubbing and dance music as he could although, with Sony and its PlayStation tapping into a similar vibe, it felt rather apt.

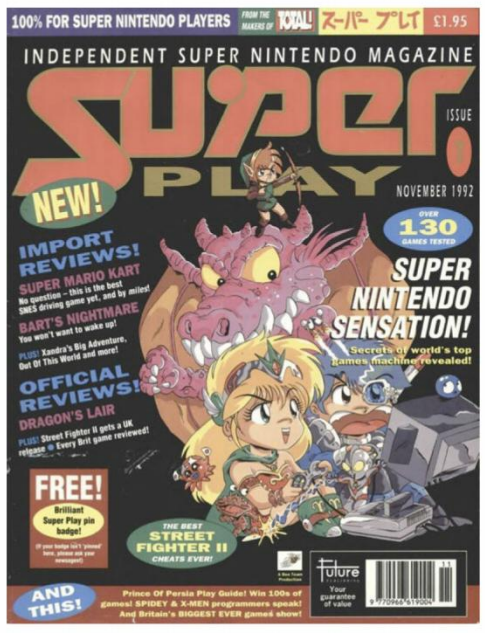
Even though he looked to the future, he also had an eye on the past. Jason introduced Retroview – a nostalgic look-back at previously released games from issue 11. But he would enjoy travelling to the US and Japan to go in-depth on the latest games and hardware. When he left *Edge* in 1998, he contributed articles to *Arcade* magazine as well as the Dreamcast-focused *DC-UK*. In the Noughties, after moving to San Francisco, he worked for the Japanese publications *LOGiN* and, later, *Famitsu* as their US correspondent.

More recently, having returned to the UK, he was working on a project called *Visions Of Video Games*, putting his talents as a graphic designer to great use. He was also studying for a masters degree in illustration at the University Of Gloucester.

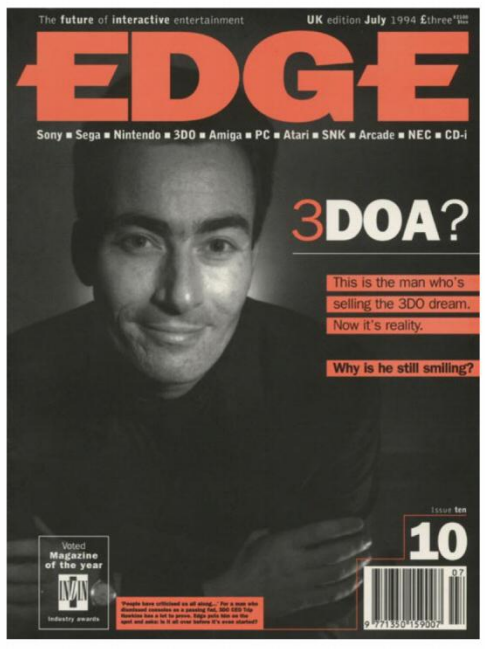
"In my mind Jason is still hanging out in California, sleeping late, listening to dance tunes, designing T-shirts, looking effortlessly cool and getting inordinately excited about things I've never heard of," says Matt. "To me, Jason was like human sunshine." ✱

» Jason's laid-back approach to schedules was at odds with his fierce attention to detail

> **"He was a hugely knowledgeable and immensely enthusiastic"**
> Matt Bielby



» Jason revealed his favourite games to be *Castlevania IV* and *Super Mario Kart* in his first issue as staff writer on *Super Play*.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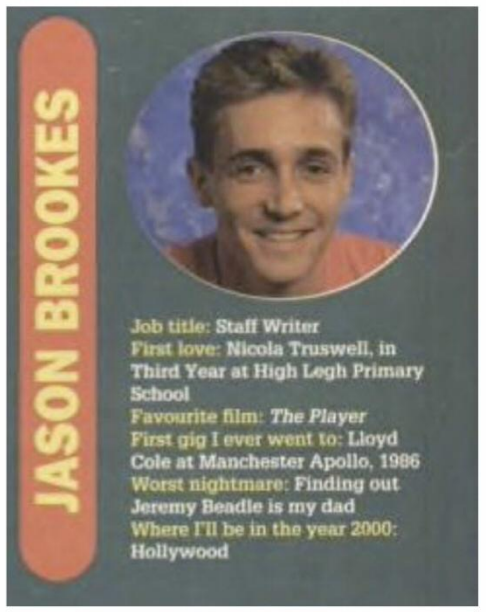
Why is he still smiling?
Issue ten
10
Voted Magazine of the year

» Jason became editor of *Edge* from issue ten and remained with the magazine for four more years.


JASON BROOKES
Job title: Staff Writer
First love: Nicola Truswell, in Third Year at High Legh Primary School
Favourite film: The Player
First gig I ever went to: Lloyd Cole at Manchester Apollo, 1986
Worst nightmare: Finding out Jeremy Beadle is my dad
Where I'll be in the year 2000: Hollywood

» In the second issue of *Super Play* published in 1992, Jason said he'd be in Hollywood by 2000. He was close-ish – moving to San Francisco around that time.

»Jason leaned towards Nintendo, which is why he ended up working on *Super Play*.

Who is Iain Lee?
Iain Lee is a freelance broadcaster who loves gaming, particularly retro gaming. He currently hosts *The Late Night Alternative* show at weekdays from 10pm on www.talkradio.co.uk and runs daily retro streams on www.twitch.tv/iainlee.

Let's get physical

My kids are amazed at my collection of vinyl, CDs, books and videogames. I have rooms full of the stuff. Not quite Mr Trebus levels, but I'm getting there.

While they kind of get the books and sort of see the beauty in CDs, the one thing they cannot understand is why I buy and own new videogames on disc. They actually laughed at me last time one was delivered to my house. To them it's an unnecessary hassle when you can just go online and download it.

I have a few responses to them. Firstly, what the hell are you gonna do with it when you've completed it or get bored? The *man* doesn't want you to trade it in or sell it on or even gift it to a friend as they lose dollar. The *man* wants you to buy non-physical copies so he make more dollar. I don't do what the *man* says. Secondly, games to me have always been physical objects. Something you can touch and look at when you're not playing. This was perhaps more important back when games on cassette took several minutes to load up. Some didn't even have loading pages, so the tape inlay was all we had to entertain us while we sat for what seemed like an eternity.

Nowadays, the packaging gives you a pretty good idea of what the game will actually look like. When I were a lad, the artwork on the front bore absolutely zero resemblance to what you would see on-screen. But because the graphics on a BBC Micro or Spectrum were so basic then, you often needed that to know what the hell you were doing in the game. These over-the-top illustrations helped bridge the gap between fantasy and reality

If I'm honest, I haven't read the instructions for years. Do games even come with instructions now? Most modern titles tell you what to do while you're playing them. Some little creature pops up and walks you through all the keys. Look, that's how old I am. I don't say buttons or controls, I still say keys.

Old games were so wildly different that you often needed an entire book to tell you what to do. If the controls were more complicated than Z is left and X is right, having it written down in a handy guide so you could look at them again and again was imperative.

And some of those old boxes were works of art. I know I keep banging on about it, but the packaging for the original version of *Elite* was a thing of a beauty. A huge manual, a novella, a cassette, a poster and a function key strip all housed in this stunning box. Unwrapping that on Christmas day at my nan's house will always be one of my favourite childhood memories. Where's the joy in getting a bloody download code?

I bought my kids *Pokémon Shield & Sword* for Christmas. I really wanted to give them a physical copy but I bottled it and bought them a bloomin' download code. What a load of rubbish. ✱

Do you agree with Iain's thoughts? Contact us at:

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Who is Paul Rose?
Paul is probably better known as Mr Biffo – the creator of legendary teletext games magazine *Digitiser*. These days, he mostly writes his videogame ramblings over at Digitiser2000.com. If you want more Biffo in your eyes, you can catch him as the host of *Digitizer The Show* at www.bit.ly/biffo2000.

Back to basics

I think it was Jon Bon Jovi who said that the mark of a good song is that it can be stripped back to a singer and a guitar. Though I don't give Bon Jovi a second thought in any other respect, this assertion has stuck with me ever since I read it in an interview 20-odd years ago.

Similarly, a good movie or TV show should have a pitch that can be boiled down into a sentence or two. The more you overload an idea, the more it seems like you lack confidence in it. You want to get the essence across as economically as possible.

It's something I often think about in terms of videogames. Typically, today's big games are sprawling, multi-genre affairs; what would be the single-sentence pitch for *Grand Theft Auto V*? Compare it to the original *GTA*, and it's a full-on, 100-piece, orchestral reworking of what was, in the first instance, a simple game. There aren't just bells and whistles, but klaxons, kettle drums, kitchen sinks, spoken word sections, keyboard solos…

Basically, all the big games are progressive rock concept albums now, and while I love me a bit of prog, sometimes I just want a bit of pop, or folk rock, or – in every sense of the word – something that's a bit more indie. *GTA V* Is still a videogame, obviously, but it's also a different sort of entertainment to the games that existed in the early years of the industry. I still think *Pac-Man* and *Space Invaders* are perfect games; play them now, and they hold up. Their graphics are simple, but entirely in service to their gameplay, which doesn't deviate from their simple, but original, chord structure.

It's telling that as games have become more graphically rich, there hasn't been a sequel to either of those classics that has managed to improve upon what was laid down 30-odd years ago. See also *Tetris*: a game so popular it demanded a sequel, but whenever a follow-up tried to alter the formula, or add to it, that detracted from what made the original so damn perfect.

With so few resources, relatively speaking, at the disposal of game creators back in the day, they were forced to keep it simple. Pick any random game from the late-Seventies/early-Eighties and it's almost always the same. Compare it to a modern equivalent – let's say Midway's 1977 cowboy shoot-'em-up *Boot Hill* vs 2019's *Red Dead Redemption II* – and you'll see what I mean.

That's not a criticism of *Red Dead* – it's a remarkable game, but it's also not one you can just pick up and dip into. It's overwhelming. Big games are now demanding in ways that the games of yore were not, and the prime demand is one of time. Of course, this is all to ignore the indie scene, where simple ideas still reign, but when was the last time a game from that sector that broke through, and achieved the sort of cultural saturation that a *Breakout* or *Donkey Kong* did? *Angry Birds* maybe?

It's more that I think the voice-and-guitar ethos can, and should, be applied more to big, open world games. Go back to the origins of gaming, learn from the simplicity they demonstrated, and ask yourself: what is this game about? Can you describe it in a single sentence? ✱

Do you agree with Paul's thoughts? Contact us at:

RetroGamerUK @RetroGamer_Mag retrogamer@futurenet.com

Yesterday once more

Stephen Sharp talks to us about his engaging new YouTube channel, Yesterzine

Retro channels have risen in popularity in recent years and it feels like everyone is talking about old games while standing in front of rows and rows of impossibly rare titles. Stephen Sharp's channel is relatively young, but it has an interesting angle, looking back at the best and worst games from his favourite magazines. Here he explains how *Yesterzine* came to be.

Where did the idea for *Yesterzine* originate?

On a forum where we were discussing magazine scans. One chap was trying to play through every game in *Zzap!64* and considering writing a blog, but that was repetitive. I suggested maybe just taking the highest and lowest rated game and us doing a podcast. Later, I hit upon the idea of adding a 'cover feature' to each issue describing something now unknown or interesting in gaming, such as when we had to import games or the forgotten phenomenon of games being wildly different on different formats, and I decided to give it a try on YouTube.

How long does each episode take to create?

Something around 20-30 hours for a 25-minute *Yesterzine,* I'd say. More if there's a complex game like *Midwinter* to try and get my head around or if the cover feature involves a buttload of research. Slightly counterintuitively, the static picture-heavy sequences also take much longer to edit than video.

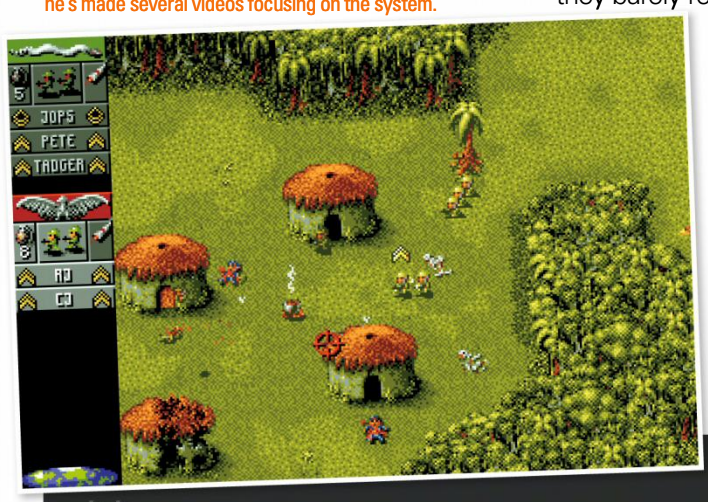
How do you choose each featured magazine?

Initially because I remembered the issue, the first two are both iconic issues to me of *The One* and *Super Play*. Later it's because there's at least one game I remember, like *Command & Conquer* or because there's a chance for a feature I want to do, like *Total* issue 21's SNES CD article or *CVG* issue 178 where they barely reviewed *Moto Toon Grand Prix*, the first game from a software developer that is now world-famous.

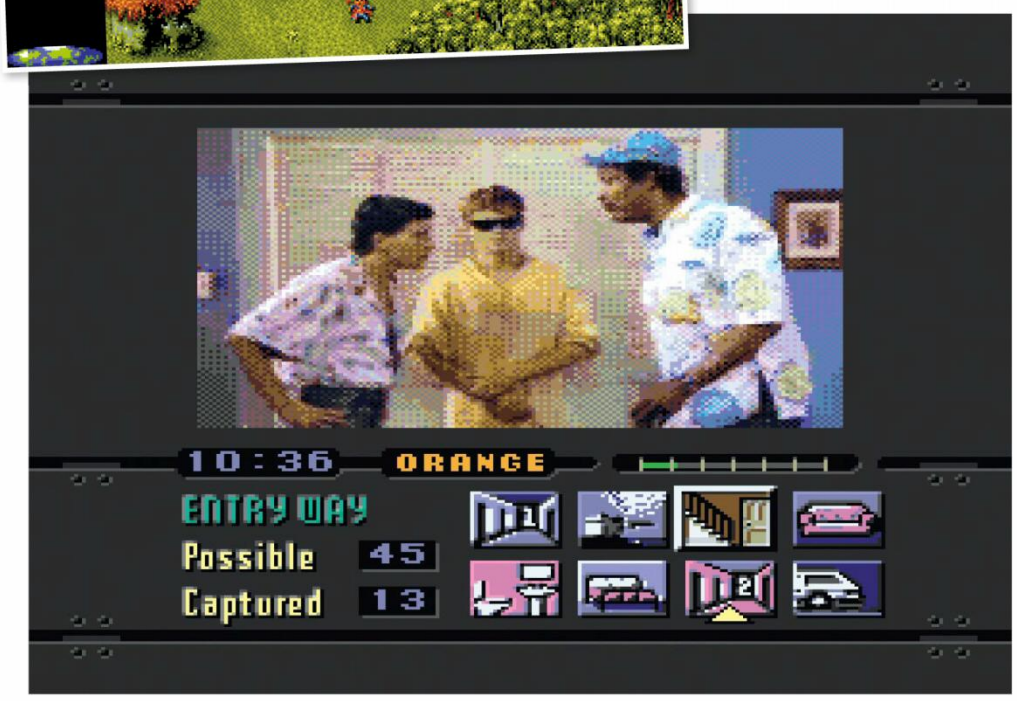
» Here's a selection of the magazines that Stephen has already covered on *Yesterzine*.

What difficulties do you face?

I'm not a hardware purist so I rely on emulation a lot and that means you have to get stuff running. In the last season two episode that meant trying to source and get running a completely forgotten PC FMV title called *Loadstar*. I ended up having to capture all the footage from a Mega-CD version, and even that doesn't work on the popular PC-based emulator so I resorted to a complex arrangement using a Raspberry Pi computer and a USB Capture device.



» [Amiga] Stephen is clearly a big fan of the Amiga and he's made several videos focusing on the system.



» [Mega-CD] While plenty of *Yesterzine* episodes look at specific games, more and more of them are featuring interesting aspects of gaming history such as the rise of CD-ROM.

What is it you like about revisiting classic magazines?

The things you forgot, or never knew in the first place. Amiga magazines bravely dismissing *Sonic*, how big a deal cover disks used to be for both the user and magazine or that *Rise Of The Robots* got 92% from one magazine and 5% from another. The special episode unpicking that is one of my favourites.

» [PC] Everything is fair game in *Yesterzine* and both classics and stinkers get featured.

Has replaying any of these classic games seen your opinion change on them?

Not so much change but I'm surprised by ones I never knew. *Death And Return Of Superman* is by Blizzard but it got an absolute kicking in *Super Play* issue 25, which it never deserved. By comparison there was a much, much worse game in that very issue. Also your perception changes because going back you're only looking for a fun hour not £50's worth, so some low rated arcade-style games have aged better than higher-rated 'deeper' games.

What can our readers do to help?

The usual YouTube stuff, subscribe, like, share and especially comment. But also, I've frequently had guests on, especially if they're an expert or have memories of the game and are willing to replay them. Also, if you spot something cool for the 'back page advert' I'd love to know. ✱

Head to **www.yesterzine.co.uk** for more information

BACK TO THE NOUGHTIES

FEBRUARY 2003 – How can you tell it's a slow month in gaming? Look for import reviews and coverage of consoles that may or may not exist – and sure enough, Nick Thorpe has found these things here. Let's take a look, shall we?

NEWS FEBRUARY 2003

The Federal Republic Of Yugoslavia ceased to exist on 4 February, as the country's legislature voted to rename itself to the State Union Of Serbia And Montenegro, and adopted a new constitution of loose confederacy. This development represented the final discontinuation of the name Yugoslavia.

February 15 saw a global day of protest against US-led plans to go to war in Iraq, with millions turning out to demonstrate in cities around the world. In the UK, where Tony Blair's government was strongly backing the plans, there was a large demonstration in London with the turnout estimated by police to be 750,000, while the BBC claimed a million. Around 50,000 people also demonstrated in Glasgow, where Tony Blair was due to give a speech to Labour members, and between 10,000 and 20,000 marched in Belfast.

On 17 February, the London congestion charge was introduced, with the goal of reducing road traffic on the capital's heavily used roads. The £5 charge had been promised by London mayor Ken Livingstone during his election campaign, and followed the successful implementation of similar systems in Durham and elsewhere in the world. 25% fewer cars than usual entered the charging zone on the first day.

Infinium Labs offered a utopian vision, with the PC's range of software combined with console ease of use. But could it deliver?

THE LATEST NEWS FROM FEBRUARY 2003

A brand-new games console was announced this month by US-based Infinium Labs, known as the Phantom. This machine was set to be launched in December 2003, and the company boldly claimed that it would offer greater performance than the existing consoles on the market. Rather than running proprietary software, the Phantom was to run PC games. The goal seemed to be to remove the complexity of PC gaming, with game installation and patching taking place automatically. "This is a joke… right?" asked the *games™* news story on the system, as the magazine felt that the announcement "smells a bit fishy", and that "creating concept images and starting rumours about something that doesn't exist isn't exactly difficult". In fact, the magazine seemed very down on the idea of the system, even if it wasn't vapourware, questioning why Infinium Labs "would be stupid enough to release yet another console in the already crowded market".

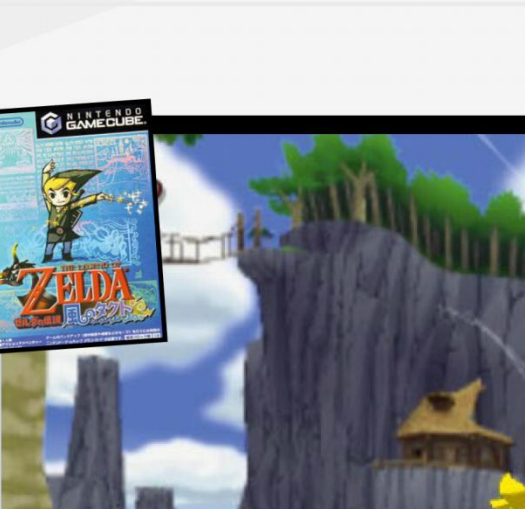
Over on the three real consoles, *Mortal Kombat: Deadly Alliance* was the flavour of the month, though opinions varied on the taste. *Edge* gave the game 4/10, arguing that although the addition of multiple fighting styles meant that there was "certainly a greater tactical dimension to kombat", combos suffered as "the timing feels slightly off compared to the precision of almost every other major franchise" and it was "all style and no substance." In *games™*, a 6/10 review described it as "a massive improvement over most of the games before it" but "by using elements made popular by other fighting games […], Midway has created a game that has nothing particularly special over the competition". Others were more impressed – *NGC* gave it 80%, describing it as "the best fighter on GameCube so far", and *Play* gave it 84%, arguing that it "lacks the fluidity and finesse of some of the competition" but was "a lot of fun with friends".

Import copies of *The Legend Of Zelda: The Wind Waker* had hit the UK, and with little else of note to cover, the Nintendo magazines jumped on them. *NGC* had some criticisms, describing the game's ocean overworld as "largely flat, and wet, and empty", and surmising that the developers "didn't have time" to make naval combat "a replayable, enjoyable activity in itself". The magazine was impressed with the game's cel-shaded visuals, which were "reminiscent of classic early Disney output, but with a recognisably Japanese imprint", and dished out a 96% score. *Cube* praised the game

[GameCube] Though its reception was uneven, *MK: Deadly Alliance* went straight to the top of the charts.

[Xbox] Sadly, *games™* would ultimately be proved right about *Panzer Dragoon Orta*'s commercial prospects.

[GameCube] To the shock of nobody, Nintendo's latest *Zelda* game was a bit good.



[PS2] Is the chaotic destruction of natural disasters the greatest horror of all? Irem seemed to think so.

for being "designed in such a way that if you think you should be able to do something, you probably can", and scored it 9.7/10.

Also on import, *Panzer Dragoon Orta* flew into the lives of Xbox owners this month. Although *games™* loved it, describing it as "a visual treat" that "improves on the original Saturn masterpiece in every way" and scoring it 9/10, it offered this grim prediction: "It's likely that the general public will overlook such a commendable offering in favour of the generous amounts of well-marketed tripe that so regularly reach high positions in the charts." *Edge* awarded Sega's game 7/10, praising its visual quality and revival of on-rails shooting, but feeling that the ability to alter your speed and switch between forms "overcomplicates the action" and that the decision to adopt some unconventional stage structures wasn't beneficial.

The PS2 has a solid but unspectacular month. The star performer was *The Sims*, which received 8/10 from *Official PlayStation 2 Magazine* and 89% from *Play*. Both magazines struggled to qualify that praise. In *Official PS2 Magazine*, reviewer Tim Clark stated that it was "hard to nail the appeal of staring at what is essentially a polygonal goldfish bowl", and described the game as "the gaming equivalent of Marmite". *Play*'s Will Johnston called it "an experience that won't please everybody" and questioned, "Is this some great existentialist work of huge magnitude, scope and pretence?" Survival adventure *SOS: The Final Escape* offered more traditional thrills,

[Game Boy Advance] Honestly, *Shinobi* on the GBA doesn't even look as good as the Mega Drive classic.

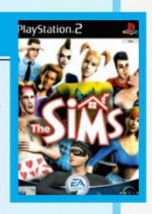
as players struggled to escape a city devastated by earthquakes. *Play* gave it 79% and *Official PS2 Magazine* gave it 7/10, chiding a lack of visual polish but praising the "wholly original concept" and crediting it with "enough nerve-biting tension to keep everybody happy".

Not to be confused with the Mega Drive classic, the Game Boy Advance received *The Revenge Of Shinobi*, described by *Edge* as "a pale, sluggish copy of the dynamic originals" in a 3/10 review. Arcade enthusiasts could enjoy the motion-controlled sword swinging game *Mazan: Flash Of The Blade*, which *games™* encouraged players to "get over your inhibitions" to enjoy in a 7/10 review. The magazine also gave *Time Crisis 3* 7/10, describing it as "nothing revolutionary" but "a good laugh". Finally, the end of the month saw one of the first mass server closures in online console gaming as Sega shut down Dreamarena, which had hosted multiplayer servers and web services for many European Dreamcast games. With the discontinuation of dedicated Dreamcast support from Dreamarena's partner ISPs, users were required to set their own ISP using a new browser disc to continue playing the few remaining online games – *Phantasy Star Online* being the most notable.

Join us again next month for more games and dodgy sales tactics!

CHARTS

FEBRUARY 2003



PLAYSTATION 2

1 – The Sims (EA)
2 – Mortal Kombat: Deadly Alliance (Midway)
3 – The Getaway (Sony)
4 – Grand Theft Auto: Vice City (Take 2)
5 –FIFA 2003 (EA)

XBOX

1 – Mortal Kombat: Deadly Alliance (Midway)
2 – Tom Clancy's Splinter Cell (Ubisoft)
3 – Halo: Combat Evolved (Microsoft)
4 – FIFA 2003 (EA)
5 – Minority Report (Activision)

GAMECUBE

1 – Mortal Kombat: Deadly Alliance (Midway)
2 – Super Mario Sunshine (Nintendo)
3 – Star Wars: Bounty Hunter (LucasArts)
4 – Star Fox Adventures (Nintendo)
5 – Mario Party 4 (Nintendo)

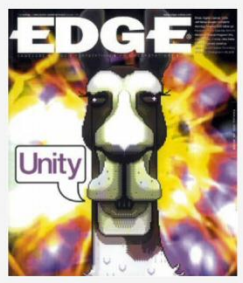
MUSIC

1 – All The Things She Said (tATu)
2 – I Can't Break Down (Sinead Quinn)
3 – Cry Me A River (Justin Timberlake)
4 – Stole (Kelly Rowland)
5 – Don't Worry (Appleton)

THIS MONTH IN...

games™

An Xbox game is selling well in Japan. Have they finally learned to love *Halo*? Not quite. *Dead Or Alive Xtreme Beach Volleyball* is already the system's second-bestselling game, shifting over 73,000 copies on day one. *games™* asks, "Could this be the turning point for Microsoft's western behemoth in the land of the rising sun?" Not quite…



Edge

"*Sensible Soccer*'s Mega Drive release candidate was rejected by Sega for a tiny error: the Italian flag was incorrect," says *Edge* in *Development Hell Part III*. "This necessitated another submission […], which delayed the game's launch by a number of weeks. This gave a new football game [*FIFA*] a lucky window of opportunity."

Play

With two new films due for release this year, the world is very excited about *The Matrix* – and that extends to its videogame adaptation. According to *Play*, it "could potentially be the finest videogame ever made". Reasons given include "individual bone movement", "guns, lots of guns," and "*Max Payne* was jerky". Okay, lads.

Lemmings

THINGS THAT MAKE YOU GO BOOM!

» AMIGA » 1991 » DMA DESIGN

I'm a big fan of *Lemmings*. I'm not particularly good at it, but I love the way it champions creativity and often gives you multiple ways to complete a level (even though I'll usually manage it by using the method that's the least economical).

The only version I own of *Lemmings* now is on the Super Nintendo, but back in the day I used to spend a lot of time playing the Amiga version as my next door neighbour owned it. We'd take it in turn clearing levels, while marvelling at the lovely compositions that were often based on classic tunes like *How Much Is That Doggie In The Window?* and *She'll Be Coming 'Round The Mountain*. Wasting hours playing the Amiga version convinced me that I should invest in the SNES version, and while it lacked mouse support, it was a more than adequate alternative – and one of the first games I used to show off the stereo mod on my RGB-modded SNES.

For me, *Lemmings* was an ace puzzle game because of many reasons, but my favourite was the fact that it actively encouraged failure. Normally, if you messed up a level in a puzzle game you had to reset it, wait for the game over screen to appear or simply turn off the game and attempt it all again. With *Lemmings,* however, you could turn your failure into something more – namely lemming genocide. Clicking the handy nuke icon would cause all the lemmings to shout 'oh no!' before exploding into a shower of pixels. Yes, it meant your game was over, but it happened in such a spectacular way that you didn't really mind.

In fact, my neighbour and I started to turn it into an elaborate game where we would lay out stages in such a way that we would end up with a domino effect of exploding lemmings across the screen, which we found hilarious. I certainly never harmed any real animals growing up, but if cruelty against digital creatures was a punishable offence I'd have found myself in some serious trouble.

IN 00% TIME 4-32

MARIO
PLATFORM SUPERSTAR

MARIO IS ONE OF THE MOST CONSISTENT STARS IN GAMING, APPEARING IN 2D PLATFORMERS THAT HAVE ATTRACTED CRITICAL PRAISE AND MASSIVE SALES FOR OVER THREE DECADES. WITH THE AID OF A PANEL OF EXPERT COMMENTATORS, WE REVEAL WHAT MAKES THEM SO FANTASTIC

WORDS BY NICK THORPE

When you look at the 2D platform genre, one series stands alone as the king of the craft – *Mario*. We're sure that some people want to argue with that, but when push comes to shove and the public has its say, it tells us that the 2D *Mario* games are brilliant. You lot voted *Super Mario Bros 3* as the best NES game ever, and declared *Super Mario World* to be the greatest game of all time. The sales of the games are frequently measured in the tens of millions rather than mere millions, and it's worth considering that for all the critical love directed towards the 3D entries in the series, their commercial performance pales in comparison – *New Super Mario Bros Wii* outsold both *Super Mario Galaxy* games *combined*. But what makes the games so great?

To really tackle that question, we need to look back to the very first game – one that is remarkably poorly documented, given its importance. Historians can't even agree on its North American release date, and because of the diminished importance of the console scene in the west during the mid-Eighties, there are very few contemporary reviews. Thankfully, the experts of the time can remember the impact that it made on them. One of those experts was Julian 'Jaz' Rignall, who was offered the chance to play an American NES console in early 1986, during a visit to Activision. "Needless to say, I jumped at the chance," he recalls. "I played *Excitebike* first, which was really enjoyable, but then I plugged in *Super Mario Bros* and was absolutely blown away."

Why did the game make such an impression? "The smoothness of the fullscreen scrolling was deeply impressive, and the graphics, music, feel of the controls, and the overall gameplay were all incredibly well polished, designed, and presented," Julian highlights. "It made most of the Commodore 64 games I was playing at the time feel old-fashioned and rather clunky. Comparatively, *Super Mario Bros* looked and felt like a full-on arcade machine. I immediately fell in love with the game, and couldn't stop thinking about it as I travelled back home to Ludlow on the train. I absolutely *had* to get a Nintendo Entertainment System, and the moment it was officially released in the UK a year or so later, I rushed out and bought one."

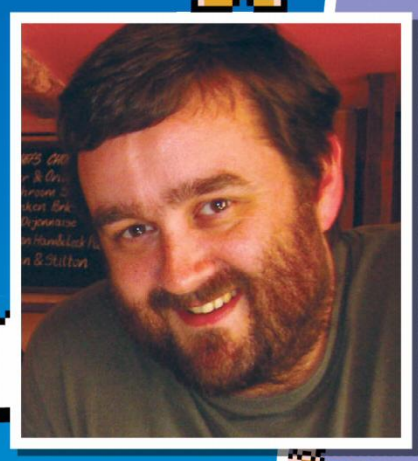
The design of the game was a huge step up compared to the game's predecessor, *Mario Bros*. That game had offered single-screen action with fixed level designs. By comparison, *Super Mario Bros* had scrolling stages many times the length of the screen, taking in outdoor stages, underground courses, underwater sections and deadly castles. Each part had unique graphics and musical themes, interesting objects including springboards and lifts, and there were plenty of secret areas accessed by travelling through pipes. In the case of the underwater stages, the game's mechanics changed massively as the jump button was reassigned to the task of making Mario swim, greatly altering the feel of the game. *Super Mario Bros* also featured an even greater variety of enemies with distinct and challenging behaviour, as well as boss battles. All of this was achieved in just 32KB of ROM, which was a remarkable feat.

Like the previous game, players were encouraged to jump into platforms from below – but instead of merely bumping the platforms to tackle enemies, players could break blocks, which was a massively important level design tool. John Romero, whose admiration for the *Mario* games fed into the design of the *Commander Keen* platformers, explains why

» Julian Rignall saw the *Super Mario Bros* series grow while writing for *CVG* and *Mean Machines*.

» John Romero saw success with the *Commander Keen* platformers before id hit big with *Doom*.

» Kevin Bayliss' graphics helped bring platformers from Rare and Playtonic to life, including *Donkey Kong Country*.



» Ste Pickford's (right) long career includes the fondly remembered SNES game *Plok*.

» Chris Sutherland (left) has designed great platformers at both Rare and Playtonic.

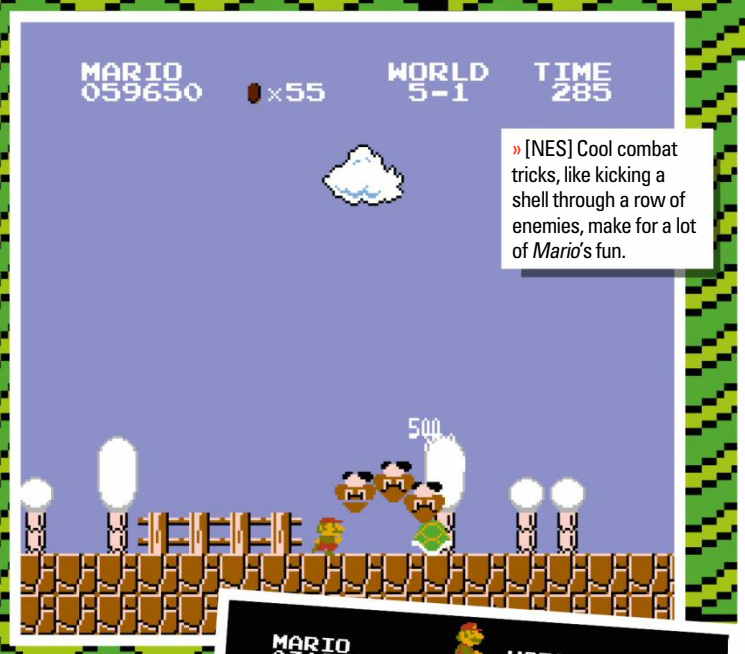
» [NES] Punishing difficulty and feel-bad items like the Poison Mushroom caused Nintendo Of America to avoid the original *Super Mario Bros 2*.

» [NES] Swimming sections add variety, though they're tough as Mario is more vulnerable and harder to control.

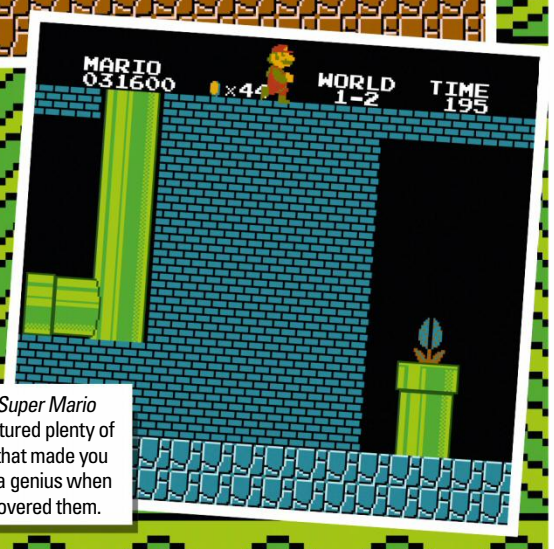
» Sten is a prolific *Mario* speedrunner, with a particular fondness for *Super Mario World*.

» Ross O'Donovan's (left) *Super Mario Maker* courses torment popular YouTubers the Game Grumps.

» Derek Yu (right) is an indie developer best known for his breakout platform game *Spelunky*.



» [NES] Cool combat tricks, like kicking a shell through a row of enemies, make for a lot of *Mario*'s fun.



» [NES] *Super Mario Bros* featured plenty of secrets that made you feel like a genius when you discovered them.

these are so useful. "Allowing blocks to break, design-wise, could be used to clear a space for a difficult jump. Hiding secret areas with destructible blocks is also a great use, such as breaking a block at the top of the screen to allow Mario to jump up and on top of the level," he explains. However, blocks had a secondary purpose that John finds even cleverer. "Hiding items in a broken block was genius – the block didn't just disappear, it gave you a reward. The idea of also changing the state of a block was smart as well – you keep hitting your head on a block as it pops out coins until it becomes solid and is done giving rewards."

Those rewards are a key part of the *Mario* design. Coins do nothing on their own but grant an extra life when 100 are collected, and are frequently imitated by other platform games – for example, with *Bubsy*'s yarn balls or *Rayman*'s Tings. More immediately rewarding were the power-ups, which could protect Mario from enemies and expand his combat ability. Added to the returning ability to knock enemies off higher platforms, this provided two familiar ways to handle threats. "One of the tricky things with power-ups is that they can be used to bypass many carefully-set-up game design puzzles, which if they can be activated anywhere makes life very challenging for the designer," notes Chris Sutherland, whose career highlights include platform games like *Donkey Kong Country* and *Yooka-Laylee And The Impossible Lair*. "That's why *Mario* games have the power-ups placed very carefully, with the expectation the player will choose to use them; but what's great is that it's rarely a requirement, so if you miss it, you're not blocked," he continues. "In fact, when you encounter a specific power-up, that's often a clue that this is to help you with an imminent challenge. For example, if you uncover a Star power-up, you're sure to find some tougher enemy configurations to run through in the coming screens ahead."

Interestingly, combat is an aspect of *Super Mario Bros*' design that is frequently overlooked. "I think we sometimes forget how weird jumping on enemies to kill them was when *Mario* games first appeared. It was unique. In almost every comparable game touching an enemy would kill you," says Ste Pickford, who worked on the fondly remembered SNES platformer *Plok*. In fact, Nintendo's developers had felt it strange that jumping on Koopas would harm Mario in the original *Mario Bros*, as the reasonable expectation would be that the turtle would come off worse – and it was that very point that led to the use of jumping attacks. "The idea of touching an enemy in a certain way (from above) changing the rules, and instead killing the enemy, was quite a subtle, clever and sophisticated game system at the time. *Joust* is the only other game I can think of that did anything similar. I remember being blown away by it at the time. Both amazed at the idea, and surprised that they went to the trouble to program a relatively sophisticated system like that," Ste recalls, before explaining the broader implications that jump attacks had for the genre as a whole. "The idea has been reused by other, later games, and is now occasionally used as a 'standard' platform game system,

SUPER SPEED BROS

STEN EXPLAINS WHY SUPER MARIO WORLD REMAINS AN ENDURING FAVOURITE IN THE SPEEDRUNNING COMMUNITY

Sten is a formidable speedrunner, with a variety of quick completions of the classic games – he can beat the original *Super Mario Bros* in under five minutes and can get through *Super Mario Bros 3* in less than three and a half minutes. But his most prolific exploits have been with *Super Mario World*, where he registers strong performances across a number of categories, including doing the full 96 exits in one hour, 22 minutes and 36 seconds – a time that puts him amongst the elite.

Thanks to his familiarity with the game, Sten has noticed the ways in which the game design supports speedrunning. "Most of the 2D *Mario* games tend to give you enough room to get up to full speed quite easily near the start of most levels, then it can be a matter of precision platforming and tight jumps, but you can usually maintain full speed through most of the stage," Sten explains. However, *Super Mario World* is not entirely speedrun-friendly. "The worst type of stages for speedruns are autoscrollers, or some on-rails levels (such as ones with moving rafts that you can't avoid riding), purely because you're stuck moving at the game's pace. Some of the on-rails levels can be 'cheesed'," he tells us. "In fact Cheese Bridge Area in *Super Mario World* is intended to be an on-rails level, however if you enter with cape and yoshi you can just run, hold right, and hold jump at the right point and you'll get straight to the end of the level."

Part of what makes *Super Mario World* interesting to run is the metagame that comes from the use of the world map in certain categories. "For a lot of categories there will just be one optimal route through the game, and that'll be the one you take. However for categories such as 96 exit – which beats every exit of the game plus Bowser – there are multiple routes through the overworld that neither save nor lose time. This allows runners to choose a route based on what levels or backups that they'd like to have earlier in the run," explains Sten. "For example, one 96 exit route gets the green switch early, which gives access to more backup capes earlier on, but it also puts Donut Plains 2 – a long autoscroller that you have to play twice – earlier in the run, meaning that if you reset after this point you have to spend another few minutes sitting around in an autoscroller. Other routes put more difficult stages earlier in the run, and some levels can be more consistent early in the run."

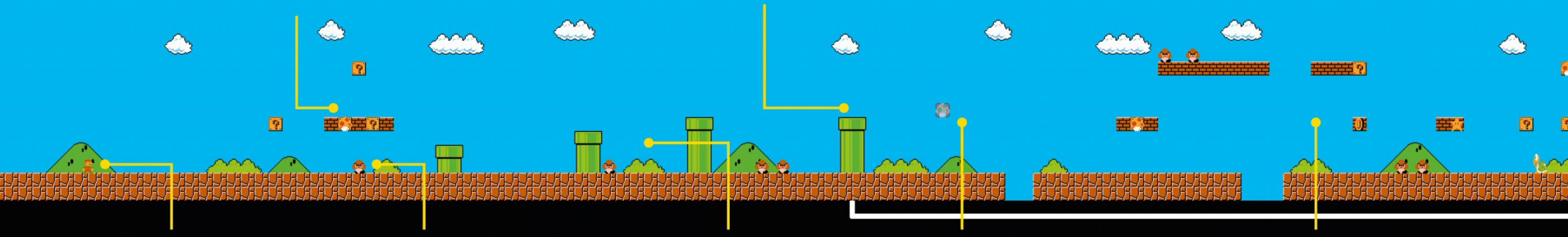
Like a growing number of skilled retro game competitors, Sten is younger than *Super Mario World* itself. Why do players keep flocking to this game? "*Super Mario World*'s a reasonably easy game to pick up as a speedrun, and it's a very well-known game, so just the sheer number of people running it leads to more people becoming good at it and competing at a high level," he says. But unlike the likes of *Donkey Kong*, which has retained a stable top level over many years, *Super Mario World*'s best and brightest are constantly changing according to Sten. "Even if older runners stop playing, new ones will tend to move in to take their place. I started running *Super Mario World* a bit over four years ago, and about half the top ten in most major categories picked up the game more recently than that."

THE BASICS OF BRILLIANCE

FOR MANY, WORLD 1-1 IS THE PINNACLE OF INTRODUCTIONS

The question mark blocks entice players into interaction. "The first question block that contains a mushroom is on a short platform so the player can understand how the mushroom slides to the right once revealed," notes Chris. "Also a pipe is placed to the right, so the mushroom rebounds towards the player making it very hard to miss this first important power-up."

The one lesson 1-1 doesn't teach you is using pipes. "One thing I love is that right at the start of 1-2 you see Mario entering a pipe to go underground, rather than just being placed directly underground," says Sten. "This teaches the player how pipes work and makes sure they're familiar with them for the pipe at the end of the stage." When you later return to 1-1, you'll experiment here.



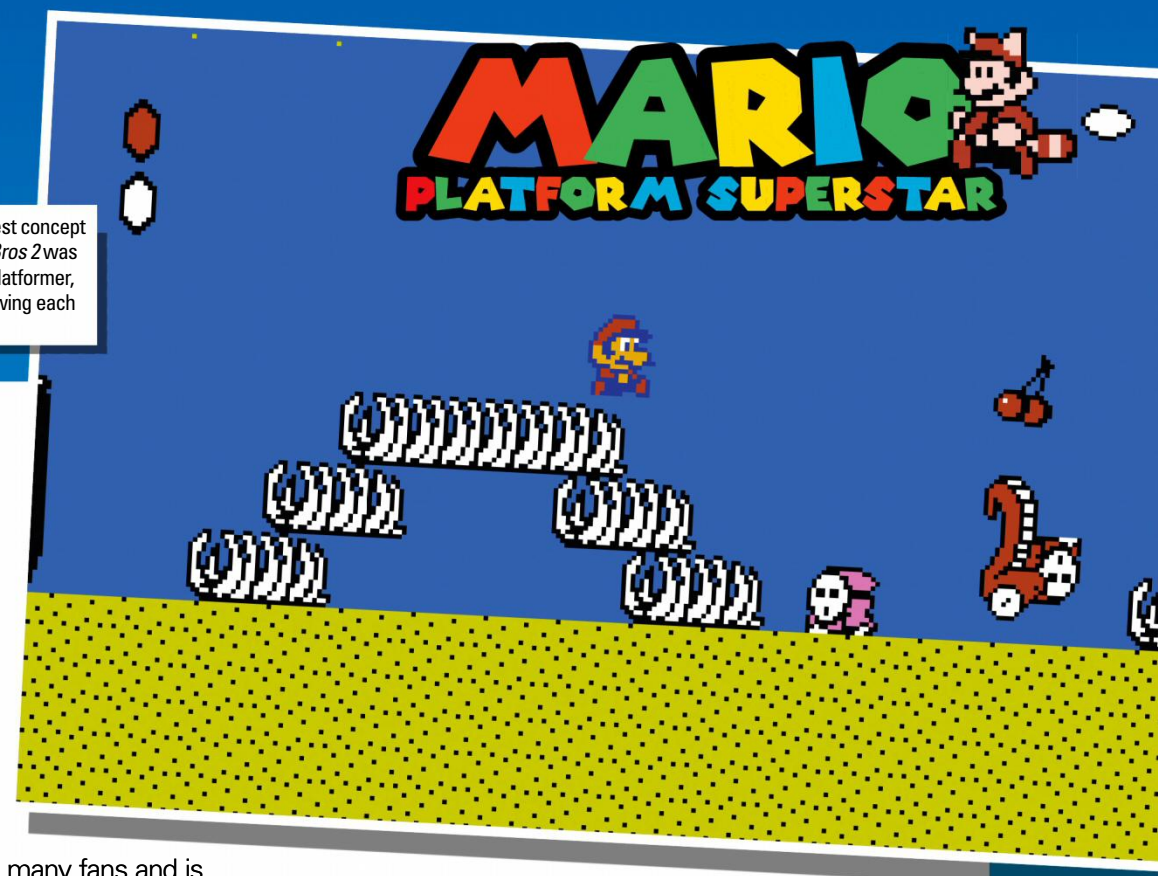
The very first screen of *Super Mario Bros* presents you with Mario and very little else, encouraging you to experiment. "If it were designed these days, there would be lots of little waypoints and glowing blobs to follow, maybe one or two pop-up tooltip-type messages telling you to jump on things," says Julian "But it's got none of that, and doesn't need to."

Your first encounter with an enemy is with the simplest of the lot – yet even this is important. "I recall when I was five and playing it for the first time, I just kept running into the first Goomba over and over," says Ross. "It truly was the perfect way to teach someone new to videogames that one of the buttons on the controller might be able to help you with this simple obstacle."

Although the player should be familiar with jumping by the time they reach the series of pipes, Chris notes that they have an important function. "Pipes of increasing heights are placed as obstacles – this helps the player understand that Mario has a variable height jump determined by the duration of the button press."

Something that many first-time players might miss is this extra life mushroom. "The fact that invisible blocks are hidden in the air encourages a ton of random jumping to see if any are around," says John. The automatic movement of the mushroom and its proximity to a bottomless pit also teaches the player a lesson – sometimes, they need to act fast to get the best items.

As the level goes on, blocks are placed higher. "The first thing it encourages is jumping and getting better at it, then aiming at blocks to hit with your head," says John. "Putting blocks up high shows the player they should jump to get higher. Power-ups are immediately available, and that lesson is taught on the second screen. Multiple types of power-ups, too." The star and Fire Flower are often encountered here.



» [NES] The earliest concept for *Super Mario Bros 2* was a vertical co-op platformer, with players throwing each other up-screen.

by people writing new retro-styled games, but it always annoys me when it's used in other games as it feels like a unique feature of *Mario*, and one that you shouldn't rip off."

For dedicated players, *Super Mario Bros* included plenty in the way of secrets. As well as the areas hidden at the other end of the game's numerous pipes, hidden blocks could grow vines leading to new areas in the sky, and particularly well-hidden Warp Zones allowed players to skip many stages. "In *Mario*, I always loved how you could go beyond the top of the screen because it felt like you weren't supposed to be there – in my opinion, the best secrets never feel like they were designed (and some of them, like Minus World, aren't!)," says Derek Yu, creator of the indie hit *Spelunky*. Such secrets have informed his own philosophy on game design. "To me, it's almost unimportant whether a secret will be discovered so long as it feels like a natural part of the game world. In this day and age, it's hard to bury a secret so deep that no one will discover it. Instead, I focus on making sure secrets are connected to the rest of the game in meaningful ways. "

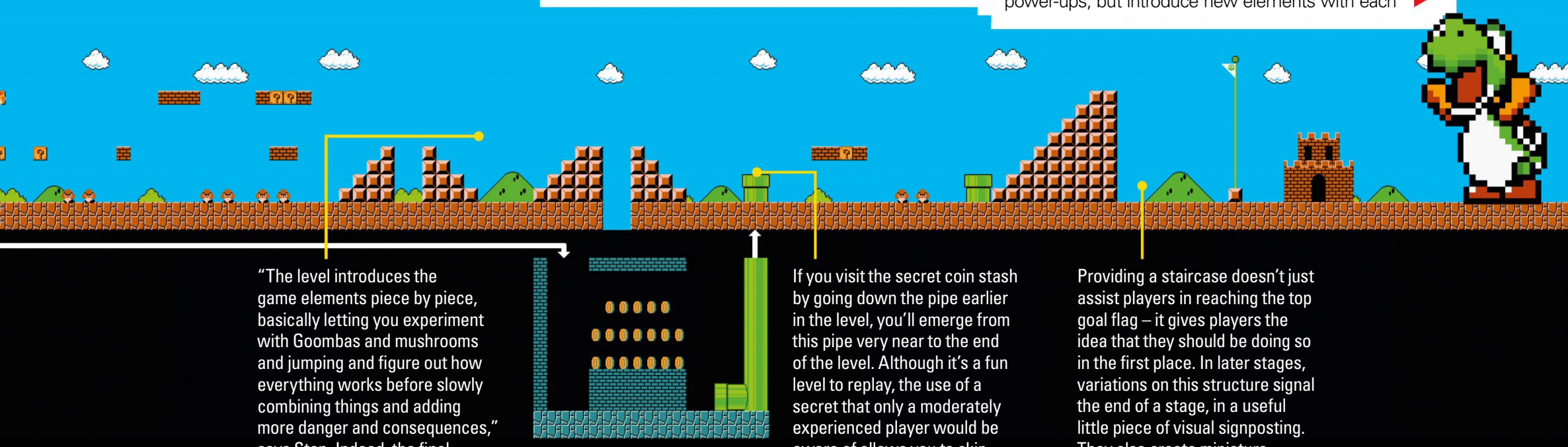
Nintendo even managed to work a little extra fun into the act of completing a stage, by challenging players to earn extra points by reaching the top of the flagpole that signified the finish line. "A great game design principle is to try to make everything into its own little game, and that's something that *Mario* games have always been good at, so you have games nested within games, minigames within the macro-game, and micro-games embedded into every subset of the game itself," says Ste. "Having an extra little game when you complete the level is a perfect example of this." Indeed, this principle was carried forward with the random power-up box in *Super Mario Bros 3* and the moving bar in *Super Mario World*.

While most of *Mario*'s excellence can be traced back to the first game, the series famously evolved in divergent directions with its second game. The Japanese *Super Mario Bros 2* offers very little notable evolution over the original game, instead feeling more like an ultra-tough expansion pack. For the international market, Nintendo localised the unrelated *Yume Kojo: Doki Doki Panic*, which had incorporated some *Mario*-style elements, but felt rather different thanks to its core concept of lifting objects and throwing them. "*Super Mario Bros 2* was a misstep for the series, and lost the essence of *Mario*, in my opinion," says Ste, and it's hard to disagree with him too strongly. Although the game has many fans and is an accomplished platform game in its own right, the series returned to its core combat concept of jumping on enemies, and although Mario has since had the ability to carry objects it has rarely been enormously important. The game's most important contribution to the series was arguably the introduction of themed worlds, each featuring distinct hazards.

***Super Mario Bros 3* brought the series back to a single worldwide standard, and had a much bigger influence on the series as a whole.** John Romero was part of the id Software team that pitched a PC conversion of *Super Mario Bros 3* to Nintendo, so we had to ask what made the game stand out to him at the time. "The amazing control and the huge amount of variety in the eight worlds. It even *felt* like it was going to be the last *Mario* for the NES – they pulled out all the stops and created a masterpiece." Sten, a speedrunner with a fondness for the *Mario* series in general and *Super Mario World* in specific, agrees that it was a major accomplishment. "I reckon the biggest advance in the formula was *Super Mario Bros 3*, which added the world map, letting you choose different paths, and different levels. It also made better use of secret areas, adding hidden items and power-ups to them, giving more of an incentive to explore every last inch of a stage. These have both been carried on into the rest of the 2D *Mario* games in some form or another," he tells us. "Lastly, it expanded the power-ups beyond just mushroom and fire. Every game from *Super Mario Bros 3* onwards has had some sort of new, usually unique, power-up to change things up a bit. Each game has added something new to give things a bit of a twist, but the overall formula has basically remained the same since *Super Mario Bros 3*."

Where previous games had featured broadly linear level progression, warp zones excepted, Nintendo introduced a new feature that fundamentally changed the way that players approached the game without interfering with the platforming one bit. Map-based level selection transformed the structure of the series, removing the linearity of the experience by letting players choose the order in which they challenged stages, or indeed whether they played them at all. "*Mario* games going nonlinear essentially removed that potentially problematic aspect of their gameplay where you can get stuck at a certain point and feel like you're banging your head against a brick wall. The nonlinear *Mario* games empowered players to play the game at their own pace and tackle things in the order that they wanted," says Julian. "Got stuck on a level? You can try playing a completely different map, and maybe learn a few things there that would help you get past the point where you were originally stuck. Or it would at least let you return to it with a fresh perspective."

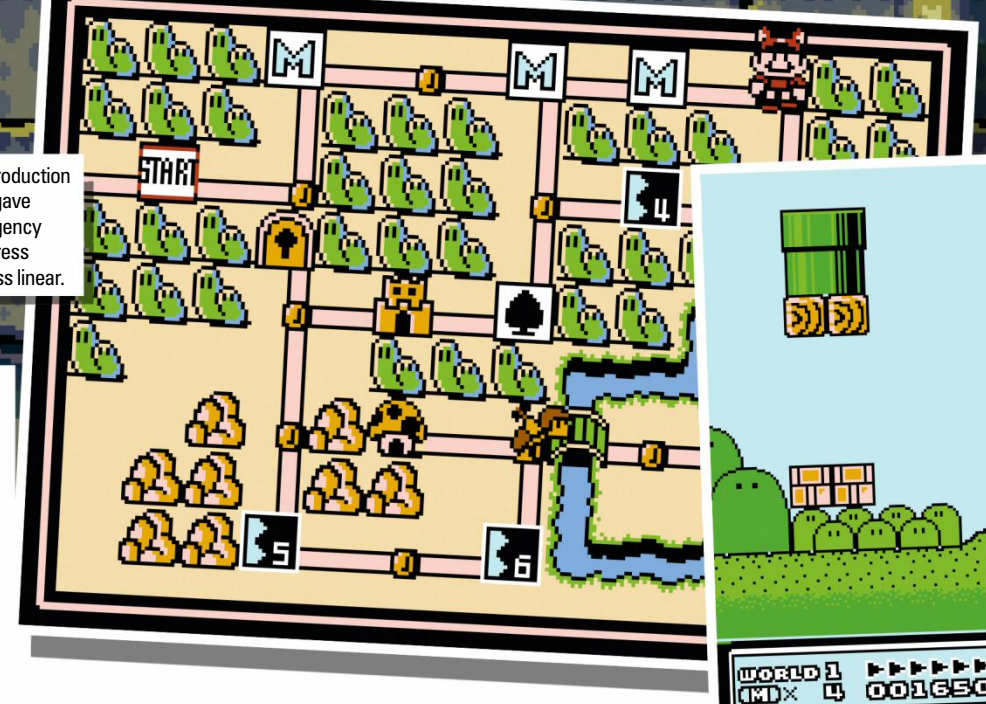
Super Mario Bros 3 also started a tradition of refreshing the power-up selection with each game. "*Mario* games generally feature the same 'classic' power-ups, but introduce new elements with each



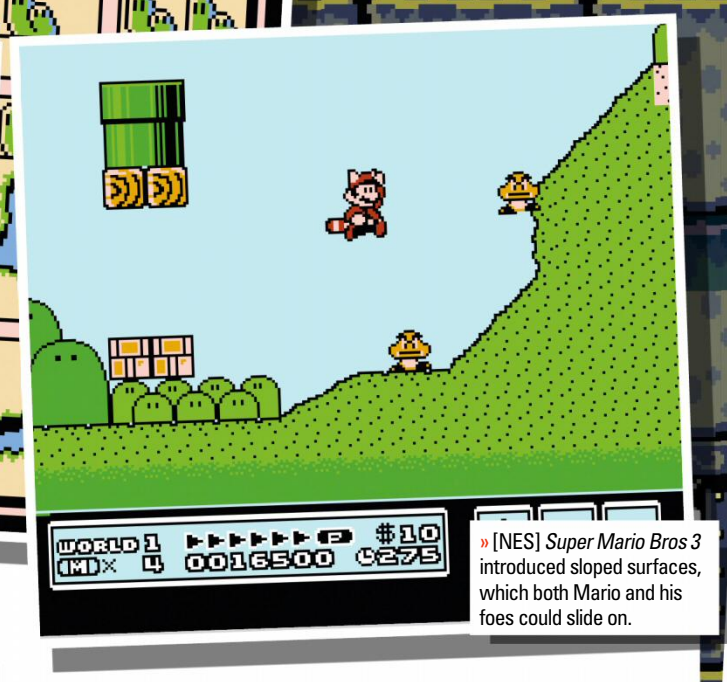
"The level introduces the game elements piece by piece, basically letting you experiment with Goombas and mushrooms and jumping and figure out how everything works before slowly combining things and adding more danger and consequences," says Sten. Indeed, the final stretch of the stage combines everything you've learned so far en route to the goal flag.

If you visit the secret coin stash by going down the pipe earlier in the level, you'll emerge from this pipe very near to the end of the level. Although it's a fun level to replay, the use of a secret that only a moderately experienced player would be aware of allows you to skip much of the game's informal tutorial – a clever choice on Nintendo's behalf.

Providing a staircase doesn't just assist players in reaching the top goal flag – it gives players the idea that they should be doing so in the first place. In later stages, variations on this structure signal the end of a stage, in a useful little piece of visual signposting. They also create miniature challenges for the player as they try to work around the changes to keep reaching the top.



» [NES] The introduction of world maps gave players more agency and made progress considerably less linear.



» [NES] *Super Mario Bros 3* introduced sloped surfaces, which both Mario and his foes could slide on.

additional entry in the series. In other words, the series sticks to its fundamentals while adding new and special power-ups that are unique to each game. To me, that's a stroke of genius," says Julian. "Whenever you started playing a brand-new *Mario* game, you had no idea of what to expect. It made the game exciting to play. You knew that you'd be running, jumping, swimming, growing and shrinking, and firing missiles at enemies – but you had no idea what else would be in store. *Super Mario 3* had items like the Tanooki and Frog suits that gave you completely new powers, and that was really good fun." Where *Super Mario Bros*' power-ups had dealt with combat, these ones trod new ground by improving his ability to traverse stages.

Following *Super Mario Bros 3*, the introduction of the Game Boy saw the parallel *Super Mario Land* line developed. The first game borrowed heavily from the original *Super Mario Bros*, though it did have unique mechanical wrinkles like Powerball Mario and shoot-'em-up sections, while the second took after *Super Mario Bros 3* with more complex stage designs and a world map. Though both were great, neither contributed so much to the series' long-term development as the next major home console game, *Super Mario World* – a launch game for Nintendo's new 16-bit console, the SNES. As well as featuring significantly improved graphics, the sequel expanded on the map system of the previous game, introduced the new Cape Feather power-up, and added Yoshi as a companion character for Mario to ride.

The new inclusions were a hit – particularly *Mario*'s new pal, who quickly became popular enough for his own spin-offs. "I loved the addition of being able to ride Yoshi in *Super Mario World*," says Kevin Bayliss, an artist with experience on hit 2D platformers at Rare and Playtonic. "Not only does it look super cute and cool, but it opened up a whole new dynamic within the game, which is now the kind of thing you automatically associate with the series. This is something that has continued and been expanded upon both in 2D and 3D *Mario* games, and it's one of my favourite features." But it wasn't just the new power-ups that impressed players, as even small level design features did a lot of work. "The iron fences that you climbed, with a little gate that flipped you from the front to the back of the fence – that was such a lovely, clever little idea, expanding on what the player was already familiar with, but adding a new dimension," says Ste.

One of the big advancements in *Super Mario World* was the ability for players to alter the layout of stages by activating new blocks in the Switch Palace stages. "I believe that in *Super Mario World*, the dotted-line blocks were added as a means for the player to adjust the difficulty themselves, with the intention that if the switches were all activated the game would become much easier," highlights Chris. "What it adds is replayability to existing levels. From a development perspective that's a good option, as it is much faster than crafting whole new levels, but it also has benefits for the players too. By having reasons to repeat play, players are encouraged to experiment in levels they already know and perhaps find secrets they didn't spot first time around." In fact, Chris believes that the design actively works towards this. "It's often interesting to consider why a particular design decision was made; in *Super Mario World*, they could have opted to not show the dotted-line blocks in the levels until the Switch Palaces were activated, but instead by having them visible in the levels they set up recurring questions in players' minds, so that when the Switch Palace is triggered it acts as a reminder of those queries, producing that feeling of, 'Oh! So now if I go back to that point in that level…'"

Since *Super Mario World*, 2D platformers have taken something of a back seat in the *Mario* series. *Yoshi's Island* introduced a whole new formula, and it wouldn't be until *New Super Mario Bros* in 2006 that the series returned to 2D. That game was a joy to behold, as enemies hopped to the beat of the music and Mario could shrink to microscopic levels or grow to screen-sized proportions. However, being designed as a somewhat nostalgic experience, the game didn't make huge mechanical strides beyond the introduction of moves from the 3D games. Indeed, this has been one of the problems that Nintendo has faced with subsequent entries in the *New Super Mario Bros* series. The developers have tinkered around the edges of the formula, introducing simultaneous multiplayer and features designed to make use of the Wii and Wii U's unique controllers, but despite massive sales they've been criticised as 'safe' and 'by-the-numbers'. They're still considered to be better than the vast majority of platform games, and that highlights the difficulty Nintendo's designers face as victims of their own past successes – how can they expand on a formula that's already considered by many to be peerless?

Of course, you don't have to guess how hard it is to make *Mario* games. Previously restricted to the

BREAKING THE RULES

The Super Mario Maker community has come up with plenty of stages that do things Nintendo never would. Here's a look at some of those things – as well as some Super Mario Maker 2 stages that do them…

AUTO-MARIO

These aren't like the autoscrolling stages in *Mario* games – these are more like Rube Goldberg machines. In these spectacular demonstrations, which sometimes involve music, a variety of objects will push Mario to the end of the stage automatically as long as you either press nothing or hold a specific direction.

RISKY RIDE
3JV-B3N-HXG

METAGAMES

These stages use *Mario* mechanics to produce an entirely different experience, often based on other videogames. We've seen examples including a crafty take on *Pac-Man*, a brilliant claw machine and various 'table tennis' levels, as well as a recreation of *Teenage Mutant Ninja Turtles*' infamous dam stage.

3D MAZE HOUSE
P59-698-55G

» [NES] Boss battles are a staple of the series, though Bowser often recruited minions after the first game.

modding community, the ability to make your own *Mario* stages has been officially available to millions of players since 2015, thanks to the *Super Mario Maker* games. Seeing what players did with Nintendo's tools quickly showed that there were plenty of things Nintendo had never done – and just as often, provided convincing arguments for why Nintendo doesn't do them. "The Nintendo level design style is to introduce a new element gently and then give the player progressively more challenging scenarios with it. Along the way, there are many secrets and small side paths for particularly observant players. It's very much the hand of a gentle but playful teacher," says Derek. "On the other hand, players tend to design *Mario* levels with the intention of subverting expectations and offering extra challenges way beyond what you would find in an official level."

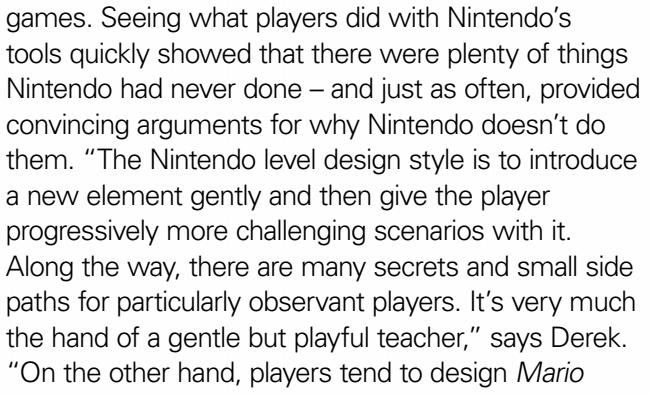
Since much of the appeal of the *Super Mario Maker* games comes from experiencing designs that break Nintendo's unspoken rules, it's no surprise to find that those stages dominate the popularity rankings, with few traditional stages making much impact. However, animator Ross O'Donovan does design some of these – often making them hard but fair, to infuriate his fellow Game Grumps on YouTube. "I feel that as new mechanics, obstacles and such are added to the game, it opens up

» [SNES] The *Super Mario World* map was more complex than before, with plenty of alternate routes and warps.

» [SNES] The yellow exclamation mark blocks appear as non-solid dotted lines until Mario activates the appropriate Switch Palace.

» [Game Boy] The Game Boy games diverged from common *Mario* themes with use of odd enemies like this spear-dropping guy.

» [SNES] Yoshi's appetite is helpful to Mario, as he gobbles up enemies and often recycles them as projectiles.



▲ CHALLENGE-FREE STAGES

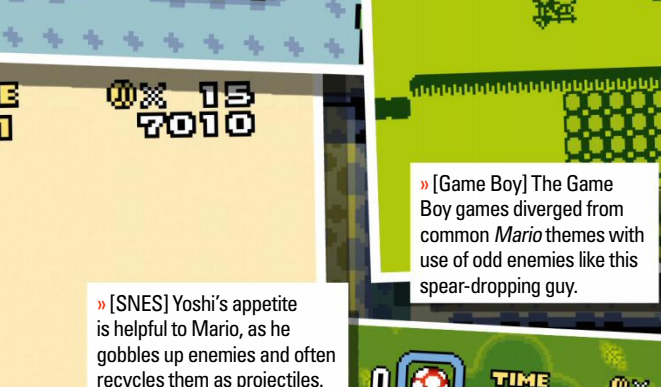
Almost every *Mario* stage, right from 1-1, has been intended to challenge the player. These stages make it very difficult or even impossible to lose a life, instead concentrating on offering the player a different sort of fun, such as mass destruction or fast movement. Unlike auto-Mario stages, they do require interaction.

DE-STRESS LAND!
VVV-G3W-VBG

▲ NARRATIVE STAGES

In stages like this, *Mario* mechanics are warped to fit the designer's chosen narrative. These cover everything from the philosophical nightmare of 'Waluigi's Unbearable Existence' to the weirdness of '1-1.exe has encountered an error', and even funny stages like 'Mario looks for an outhouse', in which our hero needs the loo.

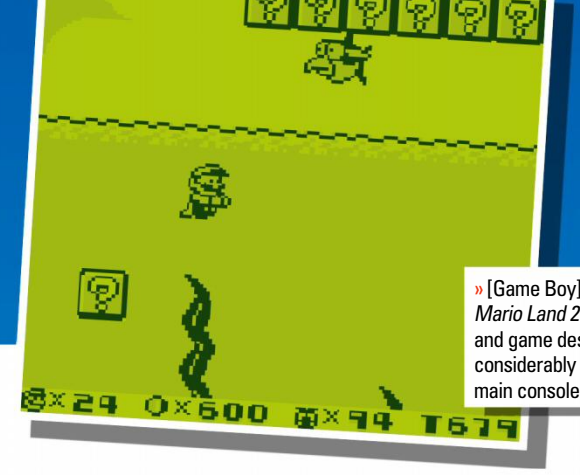
MARIO GOES TO MCDONALDS
K4W-FG2-HFF



▲ KAIZO STAGES

Named after an infamous hack from *Super Mario World*, these stages are typically brutally hard and the design does things that feel unfair, such as starting the player directly beneath a deadly Thwomp. As a result, they typically require trial and error to beat, as well as precise timing and mastery of the mechanics.

SIBERIAN SHELL SUMMIT
BHF-JNW-22H



» [Game Boy] *Super Mario Land 2*'s graphics and game design were considerably closer to the main console *Mario* games.

weird and interesting combinations. So one new deadly obstacle combined with a variety of others can potentially open up many new avenues in terms of level design," he says, in admiration of Nintendo's designs. "I like seeing how they accomplish this and slowly build up the challenges with these obstacles as the levels progress." So how do you make a level like the pros? "I feel that it's important to pick a core mechanic to explore for the level, then find creative ways to expand upon it and have the difficulty gradually increase," says Ross. "Without any sort of cohesion, the level just feels thrown together at random and isn't really rewarding gradually mastering any given obstacle. Find something you want to explore and stick to it!"

Though it's hard to make great levels even with such a rich toolset, it's far harder to build an original platform game, and many of our interviewees have done just that. "*Commander Keen* was very similar to *Mario* in several ways, purposefully," says John. "We hid secrets all over the place because they're fun to find, just like the *Mario* games. The *Keen* games encourage exploration, but also have lots of puzzles in them with keys, doors and switches. Even using your pogo stick to break stuff."

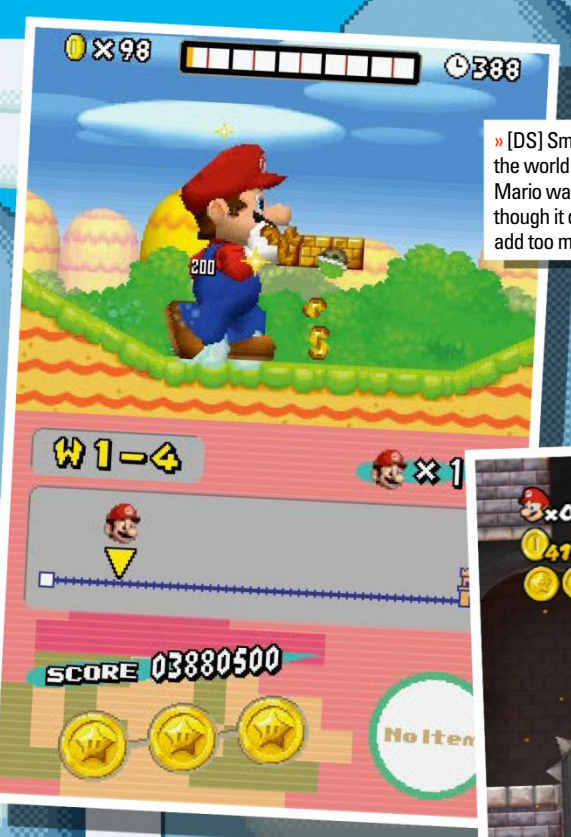
For Kevin, *Mario* is simply the natural point of reference for the platform genre. "If that's the kind of game you're gonna make, the first thing I would ask myself is, 'What would *Mario* do here?' and quite rightly so. You know if you consider that, then you're going to be going down the right tracks," he notes. "When we recently created *Yooka Laylee And The Impossible Lair*, the team are of course experienced with the 2D platform scene having been heavily involved with the original *Donkey Kong Country*. But what game did we all play when we were rendering DK and Diddy all of those years ago at Rare? What did we all look to for inspiration? Yep – I think we all know the answer to that one!" Chris provides a bit more insight as to what was going on in Twycross all those years ago. "The inspiration from Mario in *Donkey Kong Country* was perhaps more related to the design approach, not just in the physical creation (we'd heard Miyamoto had designed with Post-It notes, and inspired by this Gregg Mayles tried these same little paper tools), but also that we recognised how *Mario* games would implicitly teach the player. So whenever a new enemy or mechanic was introduced, you'd encounter the simplest version first, with later encounters adding further challenge and complexity."

Derek aspires to match something quite different. "One thing I studied closely while working on *Spelunky* were the little touches in modern *Mario* games – the 'poofs' that appear when *Mario* runs, the sparkles that appear when he grabs a coin, etc. When we think of game design, we often think of mechanics and levels, but game design includes everything in a game," he explains, highlighting the level of polish that is common in *Mario* games. "For me, a big reason why *Mario* is so enjoyable are those flourishes that we're not always conscious of but we definitely feel as we play."

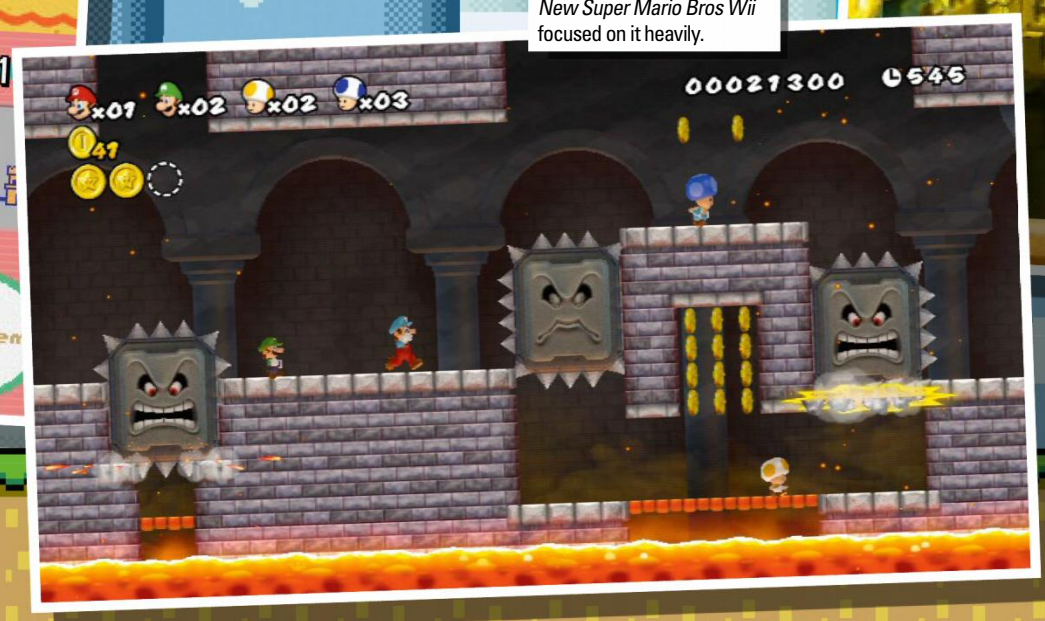
Of course, designers have to walk a fine line between borrowing *Mario*'s best elements and making something meaningfully different, and Ste is a strong advocate of this approach as evidenced in the design of *Plok*. "We definitely had the idea of mocking *Mario*, gently at least, with things like the buried flags at the end of each level on the first island, and we were obviously influenced in a general way, but we definitely consciously tried to be different," he explains. "We've never been comfortable with ripping off other games, so once we'd decided to make a game in *Mario*'s genre that was as close as we wanted to get, and after that we tried to be a little bit different. I think we were more concerned with trying to match *Mario*'s level of quality and polish rather than with taking specific ideas. The fact that Nintendo borrowed (or coincidentally came up with the same ideas as us, a little bit later on) from *Plok* in *Yoshi's Island* shows that we were on the right track in terms of quality and ideas."

Commander Keen had its own points of divergence, too. "We broke with *Mario* design tradition and didn't have any forced-progression levels where the level is constantly scrolling and you're trying to deal with it," says John, though he notes that differentiation was never a conscious goal. "If something from *Mario* made *Keen* better, we absolutely wanted to use it. We never said, 'Don't do that because it's like *Mario*.' Quite the opposite." Differentiation was also achieved unconsciously in *Donkey Kong Country*, as Chris explains. "The *Donkey Kong Country* titles did take a 2.5D approach as opposed to the pure 2D side-on in *Mario*, but that was less of a *Mario* differentiation choice and more a choice because it would better present the prerendered visuals and allow competition with other visually impressive platformers such as *Aladdin*."

But while plenty of great platform games have come and gone, none have matched the long-term success and impact of the plumber's adventures – and if anyone's going to neatly encapsulate why, a veteran wordsmith like Julian is the man. "Each new 2D *Mario* game built on the foundations of its predecessor by introducing fun new game mechanics and systems that made them even more addictive and entertaining," he says. "Indeed, going back and playing the original *Super Mario Bros* after experiencing the likes of *Super Mario Bros 3* and *Super Mario World* makes the original game feel quite basic. Brilliant though *Super Mario Bros* is, it just seems simple in terms of its gameplay after you've spun, flown, climbed, flung vegetables and generally explored the far richer worlds of its successors. But the thing is, while those newer games added additional layers of sophistication to their gameplay, none lost sight of what makes the series so fun to play. They didn't deviate from the fundamental formula that makes *Mario* games so distinctive – which is superb and highly addictive platforming action."



» [DS] Smashing through the world as Mega Mario was great fun, though it didn't ultimately add too much value.



» [Wii] Simultaneous multiplayer has been a rarity in 2D *Mario* games, but *New Super Mario Bros Wii* focused on it heavily.

» [3DS] *New Super Mario Bros 2*'s key gimmick was a coin extravaganza, the novelty of which soon wore off.

AN EXTRA DIMENSION

DESPITE BEING A 3D GAME, SUPER MARIO 64 HAD A HUGE INFLUENCE ON THE MODERN MOVES THAT MARIO CAN PULL OFF IN HIS 2D ADVENTURES

TRIPLE JUMP

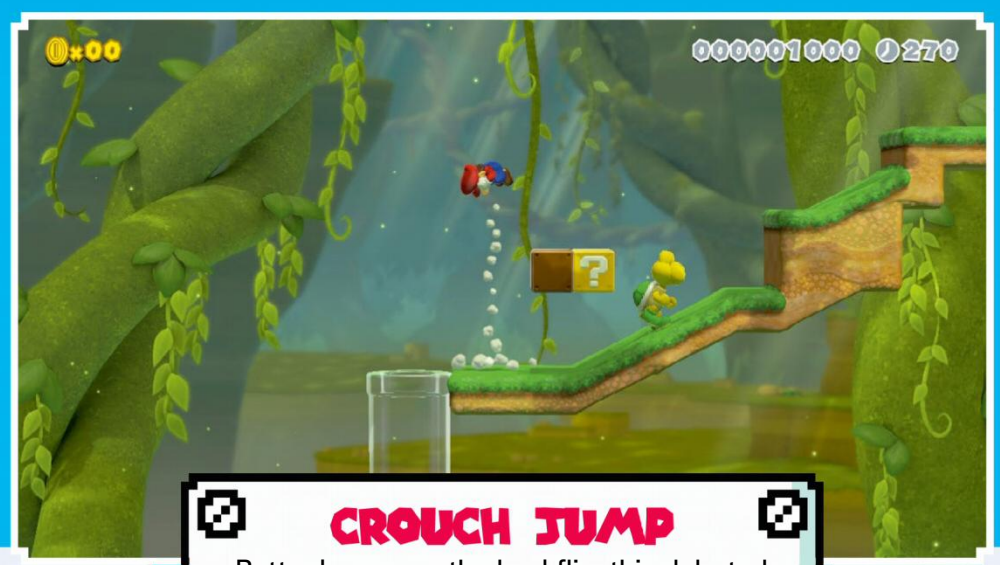
New Super Mario Bros first imported this move, which enables Mario to gain extra height by pulling off a succession of three well-timed jumps – the last of which elicits a gleeful "woohoo!"from the hero.

WALL JUMP

The *New Super Mario Bros* implementation of this move has more in common with *Super Mario Sunshine* than *Super Mario 64*, as Mario can slide down the wall before jumping.

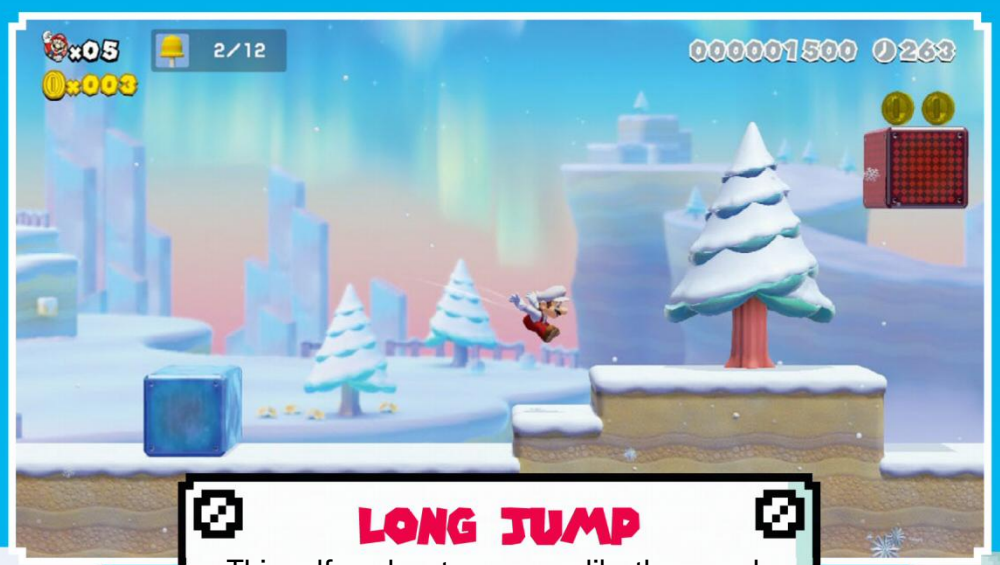
GROUND POUND

Mario originally borrowed this move from his dinosaur pal Yoshi, and it went 2D in *New Super Mario Bros*. Mario can slam directly downwards mid-jump, in order to break blocks and defeat enemies.



CROUCH JUMP

Better known as the backflip, this debuted in 2D *Mario* games as part of the *Super Mario 3D World* style in *Super Mario Maker 2*. Crouch for a while before jumping for some extra height!



LONG JUMP

This self-explanatory move, like the crouch jump, arrived as part of *Super Mario Maker 2*'s *Super Mario 3D World* style. Unlike the 3D games, you can just press R while running – no need to crouch first.

SUITS YOU, SIR

MARIO HAS HAD A NUMBER OF SUITS AND TRANSFORMATIONS IN HIS 2D ADVENTURES – LET'S RUMMAGE THROUGH HIS WARDROBE

FLYING SQUIRREL MARIO

NEW SUPER MARIO BROS U

This suit gives more limited gliding functions than the Cape, but it allows Mario to stick to walls and pipes, and gives him greater spin jump height.

ICE MARIO

NEW SUPER MARIO BROS WII

This counterpart to Fire Mario can counter enemy fireballs and freeze regular enemies with ice balls, but can't hurt larger enemies and bosses.

TANOOKI MARIO

SUPER MARIO BROS 3

This has all the powers of the Raccoon suit, but also allows Mario to turn into an invincible statue – which gives him a great slam attack if you perform it in midair.

PROPELLER MARIO

NEW SUPER MARIO BROS WII

With a deft waggle of the Wii remote, Mario can use this suit to fly upwards into the air, reaching new heights

COSTUME MARIO

SUPER MARIO MAKER

Using Amiibo figures, you could unlock plenty of different characters for everyone's favourite plumber to cosplay as, to amusing effect.

WEIRD MARIO

SUPER MARIO MAKER

This oddball transformation makes Mario weird and lanky, and gives him his brother's physics – so floaty jumps and terrible land traction, then.

MEGA MARIO

NEW SUPER MARIO BROS

Mario goes kaiju! This time-limited transformation allows Mario to stomp through the stage destroying all in his path, and earning lives for it.

MARIO PLATFORM SUPERSTAR

OFF THE WALL

Attempting to put good design principles into practice, we designed a stage in *Super Mario Maker 2*. This moderately challenging stage is all about making use of Mario's slide and wall jump moves to avoid hazards, with extra rewards available to players willing to take some risks. You can watch us play through it at youtu.be/Lkau5K014SU, or try it for yourself with the level code 69V-F3C-B1H. Let us know what you think!

BUNNY MARIO
SUPER MARIO LAND 2: 6 GOLDEN COINS
Donning a pair of rabbit ears gives Mario enhanced jumps, as well as the ability to slow his descent and glide in the air.

SUPERBALL MARIO
SUPER MARIO LAND
This is like Fire Mario, but rather than bouncing along the floor, superballs continue after rebounding off any surface, collecting coins as they go.

HAMMER MARIO
SUPER MARIO BROS 3
The Hammer Bros are fearsome enemies, and this allows Mario to take on their signature ability, throwing hammers in tricky arcs to defeat enemies.

FROG MARIO
SUPER MARIO BROS 3
This suit is kind of rubbish on land, though it does increase Mario's jump height, but in the water it makes him considerably better at swimming.

RACCOON MARIO
SUPER MARIO BROS 3
As well as gaining a neat tail whip attack, Mario gains the ability to slow his descents. Get up to top speed then jump, and he'll soar into the air, too.

CAT MARIO
SUPER MARIO MAKER 2
Imported from *Super Mario 3D World*, this allows Mario to scramble up the sides of platforms, as well as unleash a frontal paw swipe attack.

FIRE MARIO
SUPER MARIO BROS
Flower power allows Mario to shoot a bouncing fireball, which will hurt most of the enemies he encounters. Like other forms, it also shields Mario.

CAPED MARIO
SUPER MARIO WORLD
This offers similar powers to Raccoon Mario, but with the awesome ability to perform bouncing glide moves once

SUPER MARIO
SUPER MARIO BROS
He's like that regular Mario bloke, but taller. In this form, he struggles with small spaces but can take a hit from an enemy without dying.

BUILDER MARIO
SUPER MARIO MAKER 2
In a throwback to the *Donkey Kong* days, Builder Mario is armed with a hammer! He can also create up to five Builder Boxes to aid himself.

MINI MARIO
NEW SUPER MARIO BROS
Even smaller than regular Mario, this form offers little benefit other than the ability to enter small spaces that Mario's other forms can't.

PENGUIN MARIO
NEW SUPER MARIO BROS WII
Ice Mario has nothing on this – Penguin Mario can slide on his belly, and doesn't have to worry about slipping on ice thanks to improved traction.

SHELL MARIO
NEW SUPER MARIO BROS
Dressing up in a Koopa shell allows Mario to retreat and shield himself from attacks, and he can launch into a spinning attack by sprinting.

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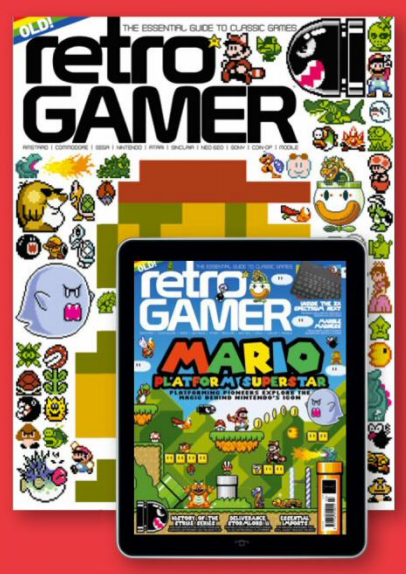

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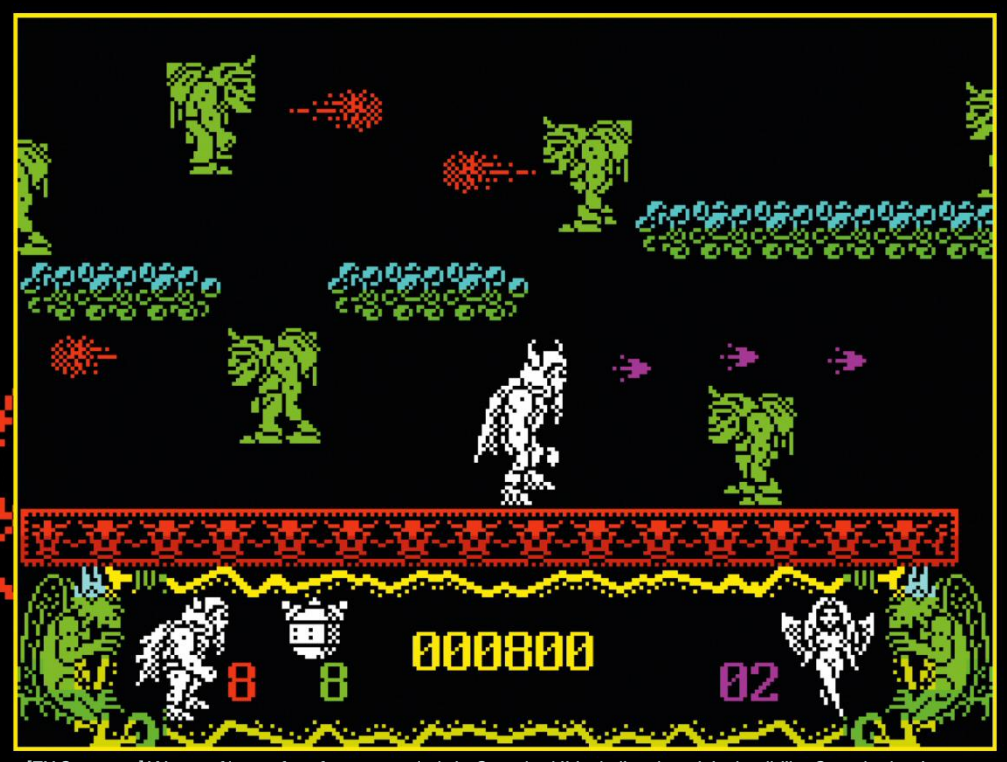
THE MAKING OF Deliverance STORMLORD II

By 1990, great new Spectrum originals were a rarity, but Raffaele Cecco started the decade by giving the system one last hurrah. Raffaele explains how he followed-up a previous hit with the ambitious run-and-gun Deliverance: Stormlord II

WORDS BY RORY MILNE

» [ZX Spectrum] *Stormlord II*'s quest begins with a naked fairy and an annoyingly agile insect.



» [ZX Spectrum] Waves of lesser foes feature regularly in *Stormlord II*, including the original troll-like *Stormlord* sprite.

By the end of the Eighties, many of Hewson Consultants' bestselling titles for the ZX Spectrum were being created by the much-publicised developer Raffaele Cecco, and so going into the Nineties, it made sense to capitalise on his last release of the previous decade with a sequel, as the seasoned designer explains. "I think *Stormlord* was a moderate success," he notes modestly, "and Hewson was pretty good at extracting maximum value from its games with sequels and multiplatform conversions. From Hewson's point of view, it meant lower risk, as the *Stormlord* IP was proven. From my point of view, the backbone of the game was already done from the previous iteration. But as it happened, I ended up developing a completely different scrolling technique for *Stormlord II*."

One immediate advantage that Raffaele's sequel gained from his experiments with alternate scrolling methods was the speed that it could run at, which allowed for more platforming and more intense gameplay. "Platforming was my preferred genre, as it gave you plenty of gameplay value from the levels," Raffaele considers. "The original *Stormlord* had been quite slow-paced. The scrolling technique that I used for the game was super smooth for a Spectrum, but it didn't lend itself to particularly sprite-heavy or demanding gameplay. So *Stormlord* was a bit hamstrung by its scrolling, but *Stormlord II* had no such limitations, and I could go all-out on the level designs."

But as a result of *Stormlord II*'s greater intensity and speed, Raffaele decided not to revisit certain aspects of its more sedate predecessor, and instead he focused on more linear gameplay without lock-and-key challenges. "I think this was the *Exolon* and *Cybernoid* effect," Raffaele reasons. "I was probably going back to my roots, and my comfort zone of designing challenging linear-style gameplay, rather than exploration and

IN THE KNOW

- **PUBLISHER:** HEWSON CONSULTANTS
- **DEVELOPER:** RAFFAELE CECCO
- **RELEASED:** 1990
- **PLATFORM:** ZX SPECTRUM, VARIOUS
- **GENRE:** PLATFORMER

DEVELOPER HIGHLIGHTS

EXOLON
SYSTEM: ZX SPECTRUM, VARIOUS
YEAR: 1987

CYBERNOID (PICTURED)
SYSTEM: ZX SPECTRUM, VARIOUS
YEAR: 1987

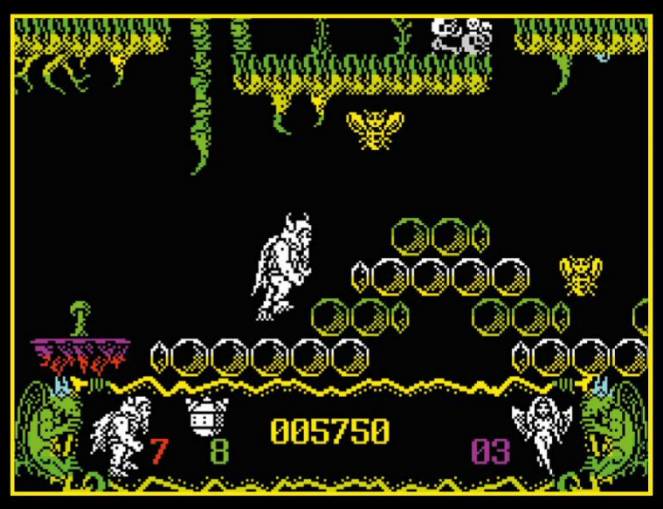
FIRST SAMURAI
SYSTEM: AMIGA, VARIOUS
YEAR: 1991

"Stormlord was a bit hamstrung by its scrolling, but Stormlord II had no such limitations, and I could go all-out on the level designs"
Raffaele Cecco

puzzle solving. *Stormlord* was quite 'cute' in terms of graphics and all the fantasy fairy stuff, which worked well with those kinds of lock-and-key puzzles, but I think I was going for more of an aggressive action game for the sequel."

Of course, in order to make his *Stormlord* follow-up more aggressive, Raffaele needed to give it aggressors, and the sequel's faster scrolling allowed for the inclusion of whole hoards of them, which certainly suited his publisher's house style. "I think that frenetic action games were a Hewson staple," Raffaele reflects, "what with *Exolon*, *Cybernoid*, *Uridium* and *Zynaps*. So if anything, I was going back to that, because I knew that those kinds of games were popular with Hewson fans. And because I'd adopted a more traditional 'screen-switch' type of scrolling technique with *Stormlord II* it worked well with more opponents and more carnage. It didn't look quite as smooth as the original, but it made up for that with much denser screens."

Further differentiations between the two games followed as Raffaele found a theme for his sequel's first level, which swapped the original's fantasy fairytale stylings for a look that channelled the nine circles of hell from Dante Alighieri's *Divine Comedy*. "I think I was going for an 'underworld' type of feel for *Stormlord II*," Raffaele ponders, "still in the same vein as *Stormlord* but with a darker and more aggressive edge. But in terms of where the game went graphically, I actually think that it was quite similar to *Stormlord*, although with scarier enemies."



» [ZX Spectrum] The confined spaces in *Stormlord II*'s levels are typically guarded by highly aggressive opponents.

» [ZX Spectrum] When *Stormlord II* stops scrolling, be prepared for a boss or an army of opponents.

In order to give players a fair chance at overcoming *Stormlord II*'s hellish massed demons, Raffaele gave his sequel five secondary weapons to its predecessor's one, and gifted his follow-up's hero with the ability to perform midair triple jumps. "This was almost certainly to differentiate the two games," Raffaele remembers. "I always thought that it was nice to have some new mechanics in there, even if the game was a sequel. I'm sure I must have pinched the 'midair' jump from some other game, although I don't remember which! But *Stormlord II*'s extra weapons and more dramatic jump definitely fitted in better with the game's faster-paced action style."

» After making *Stormlord II*, Raffaele Cecco converted *Time Machine* to the Spectrum and Amstrad CPC.

Equally suited to *Stormlord II*'s speedier scrolling was ▶

STORMLORD II STRATEGIES

HOW TO BEAT RAFFAELE CECCO'S ROCK-HARD PLATFORMER

PROCEED WITH CAUTION

Stormlord II regularly lulls you into a false sense of security with hazard-free sections immediately followed by deadly opponents or environmental features that appear from nowhere. The best approach to these seemingly safe areas is to inch forward slowly, ready to jump or hit fire at a second's notice.

FRIENDS IN NEED

Demonic creatures plague *Stormlord II*'s underworld, mortal plane and heavenly summits, but these environments are also home to allies. Fairies are the most common, and rescuing them gets you extra lives, but there are also dragons that let you ride them into battle if you catch their falling eggs.

LEFT-FIELD THINKING

Many of *Stormlord II*'s most frustrating challenges have unlikely solutions. For example, its spiders require precise timing to run under, but you can quite easily hop from one to the next, and you can avoid triggering the game's deadly clouds by limiting your jumping when you're directly underneath them.

WEAPON OF CHOICE

Like *Cybernoid*, *Stormlord II* has collectible secondary weapons, and once you have a few it's important to choose the right one for the task at hand. The crossbow and starburst have a long range, so they're good for far-off targets, where the grenades have a short range, but they cause more destruction.

WHO'S THE BOSS?

Stormlord II has two types of boss fights: some with big bads that take a lot of hits, and others with hoards of lesser foes. In fights at locations with platforms, take shelter where you can't be attacked from above, and then blast left and right. In open spaces, keep moving and attack from a distance.

» [ZX Spectrum] It's not just *Stormlord II*'s firefights that are tough, the sequel's platforming requires perfect positioning.

» [ZX Spectrum] The bosses in *Stormlord II* don't go down easily if you use the game's standard weapon.

▶ a recurring feature designed to break up his game's platforming sections, where the sequel's hero could ride dragons into scrolling firefights if he first braved hazards to catch their falling eggs. "I thought it would be pretty nice to be rewarded with a really different gameplay style if you took a bit of a risk – so it was a bit like a bonus game," Raffaele observes. "Those fast-scrolling shoot-'em-up sections were also a complete contrast to the platforming style of the game. They probably didn't make much sense, but they were fun, and we didn't overthink the storyline back then. In some ways, you wanted to shock the player and make them go: 'What!' It also broke the slower platforming levels up, and it gave players a richer arcade experience."

Another arcade-like feature that Raffaele implemented into his second *Stormlord* title came in the form of eclectic and often terrifying end-of-level bosses, although the developer can't recall his inspirations for these monstrosities. "I don't remember where I got the idea for *Stormlord II*'s bosses," he admits, "but I'd speculate that I was influenced by the arcade and console games that I was playing at the time. I don't think I'd previously done bosses either, so it was a novelty for me, and in those days I just developed what I liked! My logic was that if *I* enjoyed it other people probably would too."

As well as boss fights, Raffaele also devised bonus rounds, where *Stormlord II*'s protagonist

» [ZX Spectrum] The *Asteroids* tributes in *Stormlord II*'s last level shouldn't work, but they're a perfect fit.

would have to create staircases out of hearts. "I wasn't that familiar with *Starquake*," Raffaele responds when asked if the Steve Crow game helped inspire *Stormlord II*'s bonus round mechanics, "but looking at my back catalogue, I wouldn't be surprised if I'd been influenced by my own arcade conversion of *Solomon's Key*. I really liked *Solomon's Key*, it was a very underrated coin-op in my opinion, and the little wizard in that game could lay down blocks with his wand and make staircases. The implementation wasn't identical to *Stormlord II*, but I think the theory is plausible."

Raffaele is more definite, however, on his reasons for designing two more worlds for *Stormlord II* after completing its underworld: one set on the mortal plane and another that depicted the heavens above. "I thought *Stormlord* was quite 'samey' throughout," Raffaele argues, "so theming the

"I don't think I'd previously done bosses, so it was a novelty for me, and in those days I just developed what I liked!"
Raffaele Cecco

CONVERSION CAPERS

ZX SPECTRUM

One of the best Spectrum run-and-guns, Raffaele Cecco's original boasts three unique worlds, which are impressively colourful given the system's hardware restrictions. Despite its stiff challenge, nonstop action and impressive setpieces make it well worth playing through to completion.

AMSTRAD CPC

Although the Amstrad *Stormlord II*'s use of the system's low-res mode means that it's more colourful than the original, the downside is that it gives you less room to manoeuvre, which makes an already tricky game even harder. That aside, the CPC version plays identically to its inspiration.

COMMODORE 64

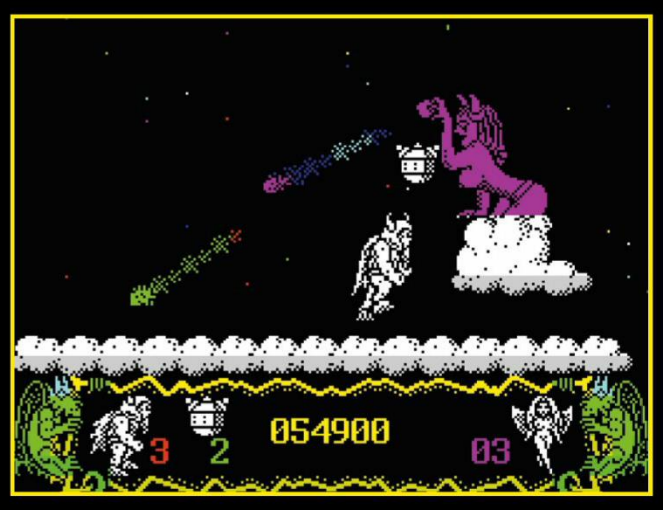
The C64 version of *Stormlord II* is *very* impressive. Because it's sprite-based, its graphics appear slightly less refined than the original's, but they still look great. It also runs far faster than its Spectrum counterpart, has more intense sound effects and comes with better and more varied music.

AMIGA

The 16-bit versions of *Stormlord II* are entirely different from the original. The Amiga iteration was designed by Belgian artist Kim Goossens, who decided that a straight conversion wasn't ambitious enough. Instead, the developer devised a four-way scrolling, hack-and-slash with stunning visuals.

levels for *Stormlord II* seemed like a natural progression. I vaguely remember having a bit more time on my hands for the sequel's graphics, as *Stormlord II* was easier to develop because of the less flaky scrolling technique. Also, the different action scenes and bosses in *Stormlord II* lent more scope for varying the graphics and environments."

Arguably, Raffaele saved *Stormlord II*'s most varied environmental features for its final stage, although the designer explains that its *Asteroids* tribute, as with the game's use of its predecessor's original troll-like hero in its earlier levels, was down to expediency rather then variety. "*Asteroids* was an easy sub-game to knock out – at least my implementation of it," Raffaele concedes, "and using the original 'troll' sprite from *Stormlord* was just a case of recycling. I was probably running out of ideas at that point, so that's when I switched to 'random-ideas-and-kitchen-sink' mode! I'd love to say that a lot of thought went into the *Asteroids* sub-game, but I think it was just an easy way to wrap the game up. Still, I think it worked well in the end."



» [ZX Spectrum] Naturally, *Stormlord II*'s ultimate boss is a naked fairy, and she doesn't lack firepower.

On completion, Raffaele brought his finished project to his publisher for approval, and although the developer had doubled down on the number of scantily clad fairies in *Stormlord II* compared to its predecessor there were no concerns raised over creating another controversy. "I don't think this was something that was even considered," Raffaele reckons. "I think the market had matured a bit by then – consoles were coming out with all sorts of games, and I don't think that some vague nudity was an issue. I don't remember having a conversation about this with Hewson for *Stormlord II* at all. I think we knew what the acceptable limits were, and I don't think there were any complaints from 'concerned citizens'."

As expected, *Deliverance: Stormlord II* – to give the sequel its full title – was released without much fuss over its naked non-player characters, but the game's formidable challenge was questioned by otherwise enthusiastic reviewers. "I think the reviews for *Stormlord II* were okay," Raffaele says philosophically, "but they probably weren't in the *Exolon* or *Cybernoid* league. The market was changing, and I think we were all looking at 16-bit titles and consoles. The Speccy was reaching its twilight years in some ways, and it was time to move on. I don't think the expectation was that *Stormlord II* was going to be an 8-bit blockbuster like some of my earlier games, but it was a pragmatic reuse of an existing IP."

With hindsight, Raffaele would make one or two changes to his unforgiving but highly rewarding run-and-gun, but interestingly he wouldn't make it any easier, perhaps because his 8-bit games were defined by their stiff challenge. "I would probably revisit the scrolling to try something that was a bit smoother," Raffaele suggests, "so that it was some kind of mix between the *Stormlord* and the *Stormlord II* method of scrolling, although I don't know what off-hand! And the 'game completed scene' was a bit abrupt, as I was probably pushed for time, so it would be nice to have something a bit more elaborate and rewarding for the players."

» [ZX Spectrum] *Stormlord II*'s finale sees its hero netting extra points for each fairy that he's rescued.

Those minor alterations aside, however, the highly respected game developer is rightly pleased with his final ZX Spectrum original, and he takes satisfaction from the fact that those that played *Deliverance: Stormlord II* appreciated all of his hard work on the title. "I think *Stormlord II* was a decent 'last hurrah' on the ZX Spectrum," Raffaele enthuses, "although maybe not actually my last title on the Speccy! It wasn't my best game, but I did put a lot of effort into it as usual. It had a few nice game mechanics in there, and some nice graphics and sound, but the main thing is that players enjoyed it." ✱

THE ECLECTIC ADAPTATIONS OF STORMLORD II

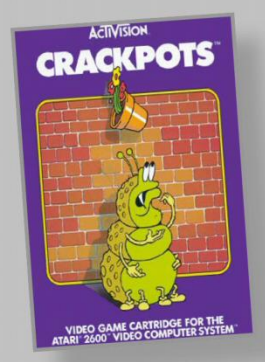
ATARI ST

Essentially a slightly less colourful version of the Amiga *Stormlord II* without speech samples and with less impressive sound effects and music, the ST port is nevertheless an extremely faithful conversion. It's as fast as its 16-bit rival, and its intense game design is absolutely identical.

MACINTOSH

At first glance, the Mac *Stormlord II* looks exactly the same as the Amiga version, and in terms of gameplay, music and sound effects it is. But its visuals have been censored, and so injured foes ooze green fluid, fairies wear bikinis and there are no graphic scenes when Stormlord dies.

THE MAKING OF
CRACKPOTS



This cute action game is a classic example of how Activision pushed the Atari 2600 to its limits. We caught up with creator Dan Kitchen at the Free Play Florida show to talk sprite switching and sewer bugs

WORDS BY PAUL DRURY

IN THE KNOW

- **PUBLISHER:** ACTIVISION
- **DEVELOPER:** DAN KITCHEN
- **RELEASED:** 1983
- **PLATFORM:** ATARI 2600
- **GENRE:** ACTION

For Sir Isaac Newton and his theory of gravitation, inspiration came from an apple falling on his head. For Dan Kitchen, was it a similar incident involving a plant pot that gave him the idea for *Crackpots*, we wonder?

"It didn't actually hit me on the head," chuckles Dan, "but I was having lunch with my brother Garry and Dave [Crane – Activision cofounder] who was visiting us in our town of Glen Rock, New Jersey, back in 1982. There was a construction site across the street and I did see a pack of plants fall from scaffolding. I just thought, 'That would be fun to do…'"

This painless epiphany lead to Dan's first game for the Atari 2600, which required your character, Potsy, to defend his building against an onslaught of giant insects by pushing pots off the rooftop and crushing the critters. Previously, he had worked on handheld games including *Wildfire*, an electronic take on pinball released in the UK by Palitoy, but he and his brother were eager to get into console development, so they attended the CES show in January 1982 and were approached by both Atari and Activision. "Both companies wined and dined us," smiles Dan, "but we knew from the games we'd played that Activision was the one we wanted to join."

» Dan (far right) at the Free Play Florida show with (left to right) his brother Garry, Activision cofounder David Crane and your correspondent.

Dan was one of five coders who constituted Activision's new East Coast office and all were given a free hand to develop their own titles, initially using an Apple II which was superseded by a PDP-11 development system sent over from the company's head office in California. "I drew the flowerpots, made them drop from the ledge and liked how it looked," explains Dan. "Dave came out to see the initial screen and I remember him saying the curb where the bugs came out was the wrong colour. You see, in New Jersey yellow means a no parking zone but over in California, it's red!"

» [Atari 2600] There's a real sense of satisfaction if you manage to crush multiple bugs with a single pot.

It was this kind of attention to detail which typified the design ethos at Activision and it can be seen in the many sweet touches that Dan included in *Crackpots*. Note how Potsy leans forward to tip the pots off the ledge as he flits across the rooftop and successfully striking an invading insect sees them fade out gracefully. "The little touches are what make a good game into a great game I think," nods Dan. "That effect needed a little bit of trickery to go through the colour palette of the spider… sorry, 'sewer bug'!"

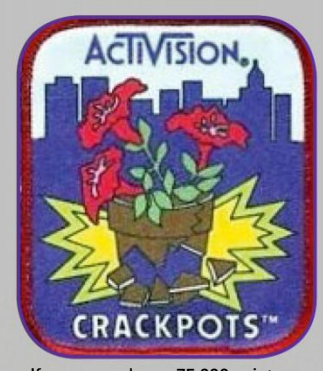
Yes, though Dan imagined he'd created waves of antagonistic arachnids, marketing renamed them sewer bugs, alluding to the drains from whence they came. Whatever their genus, they offer an increasingly difficult challenge. Black bugs head

DEVELOPER HIGHLIGHTS

CRYSTAL CAVERNS
SYSTEM: APPLE II, COMMODORE 64
YEAR: 1982

DAN KITCHEN'S TOMCAT: THE F-14 FIGHTER SIMULATOR (PICTURED)
SYSTEM: ATARI 2600, ATARI 7800
YEAR: 1989

GHOSTBUSTERS II
SYSTEM: NES
YEAR: 1990



» If you scored over 75,000 points on *Crackpots* you qualified for one of Activision's famous patches.

» [Atari 2600] If six bugs get into your building, they chew through a whole floor.

» [Atari 2600] Dan did consider using the paddle controllers, a nod to the '*Kaboom!* in reverse' gameplay.

> "The little touches are what make a good game into a great game I think"
> Dan Kitchen

straight for one of the six windows in your buildings but then blue and red bugs start to meander their way up the wall, making hitting them with a well-timed pot-drop a tricky task. By the time you get to the green bugs, which zigzag like drunken bishops, defending your home becomes a frantic battle, especially as everything speeds up with each wave cleared. Fortunately, instead of being granted the traditional three 'lives', players were allocated six 'bonus bugs' at the start of each level. One was lost for each enemy that made it through an upstairs window and if six got past your defences, they would chew through the floorboards and the whole building would come shuddering down a floor.

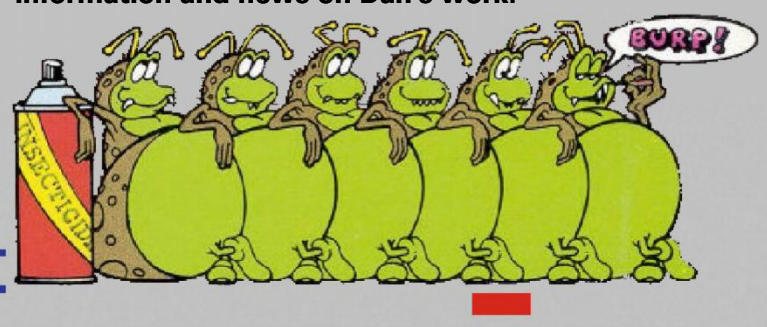
"I thought it was a unique effect," grins Dan. "If the bugs were getting into your building and munching on it, it had to be getting smaller! And that of course gives you less time to react next level. The real challenge was getting multiple flowerpots dropping and multiple spiders climbing up the building. You see, the Atari only really has five sprites or objects, so I had to use repositioning code and get it all to synchronise. And the mandate from Activision was 'no flickering'! We'd work for weeks to remove even the slightest pixel of error in our products. It had to look perfect."

Crackpots is indeed both visually and technically impressive and a 2600 game that really deserves wider recognition. Sadly, its release in 1983 coincided with the infamous videogame crash in the USA. "It hit the shelves for $30 when there were games selling for $2 so I don't think it had a chance," he sighs. "There was a TV commercial made but I'm not even sure it was aired. You can see it on my website. But I can tell you, we would've created these games even if they weren't sold. It was so much fun, especially on the Atari, and the excitement you had when you hit that switch and saw your creation light up from your imagination… that inspired us to make more and more of these games."

And Dan hasn't quite finished with the Atari 2600 yet. Back in 1983, he began work on a sequel to his brother's game *Keystone Kapers*, this time set aboard a railroad in the Old West, but the aforementioned crash meant it was never completed, a fact that had always bothered him. Then in 2018, he found the only surviving copy of the unfinished game in a dusty storage unit. "I'd been thinking about what I could do with it for over 30 years and I'm better now on the system than I was back then. I didn't have the rights to the original name so I've called it *Gold Rush* and you should be able to buy the finished game this year!"

You can visit dankitchengames.com for more information and news on Dan's work.

» [Atari 2600] The erratic movements of the green sewer bugs make them a tough challenge, especially on higher levels.



CRACKING IT

DAN PROVIDES HELPFUL HIGH SCORE TIPS

SIDEWALKING

Try to hit the bugs while they're crawling along the sidewalk or when they're just coming out of the sewer. The closer they get to the windows, the less time you'll have to react.

THREE IS THE KEY

Later on, bugs crawl too fast for you to get them all, so focus on guarding three windows in the middle. It's okay if a few get past as you only need to kill seven out of 12 bugs to advance.

COLOUR CODING

Note that the red bugs end up two windows away from where they began their diagonal climb, and while the building is high, the green bugs end up at the window above where they began.

THE NEXT LEVEL

INTRODUCING THE ZX SPECTRUM NEXT

» When not spearheading the Spectrum Next project, Henrique Olifiers is a veteran game designer and boss of BAFTA-winning Bossa Studios.

» Friend of **RG** Jim Bagley, the man behind a bunch of Spectrum classics including *Cabal* and *Midnight Resistance*, is a key member of the Next team.

WILL 2020 BE THE YEAR OF THE SPECTRUM NEXT? WE TALK TO HENRIQUE OLIFIERS AND JIM BAGLEY ABOUT THE HIGHS AND LOWS OF CREATING A TRUE SUCCESSOR TO THE MUCH-LOVED SINCLAIR MICRO

WORDS BY MARTYN CARROLL

"THE NEXT IS A TRUE EVOLUTION OF THE ORIGINAL ZX SPECTRUM, WHAT WE WOULD HAVE WANTED SINCLAIR TO HAVE LAUNCHED TO RIVAL THE ST AND AMIGA"
HENRIQUE OLIFIERS

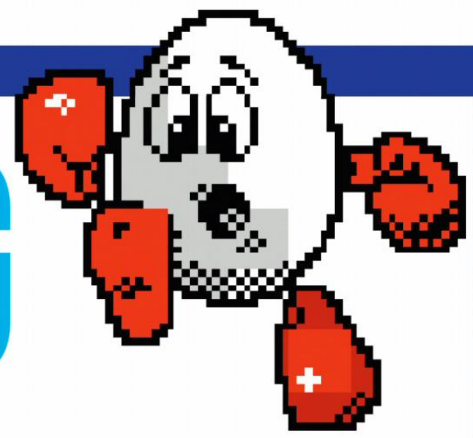
We catch up with Henrique Olifiers in late December and find him in a reflective mood. The Spectrum Next, the project that has occupied his waking hours (and no doubt disturbed his dreams) for the past three years, has finally entered the production phase with machines expected to be in the hands of eager backers in February. He's still beyond busy, but this is a significant milestone on a long and difficult journey, so he can afford to reflect on the events that have led to this point. For Henrique, the journey actually began more than 35 years ago.

"I will never forget finding my Spectrum under the Christmas tree," he tells us. "I remember opening the box, grabbing the manual, typing in my first program to discover its capabilities. This experience forged my passion for computers." It's an experience many Spectrum fans will relate to, and one Henrique hopes they'll enjoy all over again when the Next is finally released. Because not only does the Next look like a Spectrum, it *feels* like a Spectrum – and that's important. You see, the guts of the Next is the TBBlue, a replacement Spectrum board that was designed by Brazilians Victor Trucco and Fabio Belavenuto. The board achieved some success in Brazil, so the pair asked fellow countryman Henrique if he could help export it to the UK. It would have found success here no doubt, but Henrique wasn't interested in just releasing a bare board, and so the idea for a new ▶

▶ Sinclair-branded computer was born. "That's the difference between the TBBlue and the Next," he says. "One is a beating heart, the other's a fully fledged individual capable of incredible things. And that makes all the difference."

The analogy works. The TBBlue remains at the heart of the Next, but the hardware has evolved in line with the project's ambitions. "The Next features an enhanced version of the TBBlue, integrating several expansions over the original," reveals Henrique. "The final version incorporates things like HDMI video, new graphical and audio modes, hardware sprites, extra memory, expansion ports for a Raspberry Pi accelerator board, wireless networking, increased processor speeds and so on. As time went by, more and more collaborators joined the project and started expanding it. Everything from the firmware to the OS has evolved significantly thanks to the invaluable work of people like Allen Albright and Garry Lancaster."

One of the key contributors is Jim Bagley, the former Special FX coder whose role runs deeper that just being the face of the Next at various events, and being the star of launch game *Baggers In Space*. Joining the conversation, Jim says: "When I first got my Next dev kit, before becoming part of the team, I decided to add extra features to it, as it was titled the Next so I thought it really needed to be a next iteration of what the Spectrum could have been had it come out back in the day. I also wanted to make it more user-friendly,



NEXT LEVEL GAMING

A TASTE OF WHAT YOU'LL BE PLAYING ON THE NEXT

BUBBLEGUM BROS

DEV: Software Amusements
ETA: Out now

The latest Next release from the prolific Adrian Cummings looks like a *Bubble Bobble* clone, but it plays more like a straight platform shooter. There's lots of lovely colour and some nice tunes bring the game to life, and it should prove to be a good go-to game if you're looking for two-player larks.

BAGGERS IN SPACE

DEV: Rusty Pixels
ETA: February

One of the best known Next titles thanks to it being demoed at various retro shows. It plays like a mash-up of *Jetpac* and *HERO*, with your friend and miner Baggers having to explore lethal caverns in search of fuel to power his ship. No doubt this will be one of the first games Next owners test.

WARHAWK

DEV: Rusty Pixels
ETA: March

Shmup fans are sure to love this update of the old C64 game that has been given a Next makeover by original coder Flash and the guys at Rusty Pixels. It features 20 levels of frantic blasting action and some massive bosses to obliterate. It's also very fast, showcasing the power of the Next.

DREAMWORLD POGIE

DEV: WASP
ETA: Spring

This stretch goal game is expected to be available not long after launch, and is looking to be as good as – if not better than – the NES version on which it's based. It manages full-colour, fullscreen scrolling with ease, and should be another title to amply demo the Next's gaming capabilities.

WONDERFUL DIZZY

DEV: Evgeniy Barskiy et al
ETA: Summer

One of the most anticipated releases is this new *Dizzy* adventure designed by The Oliver Twins. However the game is being developed for the Spectrum 128 and we're told that only some elements will be enhanced for the Next. Still, with 67 rooms to explore it'll hopefully be *absolutely brilliant*!

as anyone who has programmed a Spectrum will know all about the weird way the screen is laid out in memory. I get a lot of people asking me how do you draw sprites and get them moving around, so I thought if I can make it easier for newcomers to get started there will be more chance of them getting the buzz of 'I did that' and hopefully they'll continue playing with it. Do you remember when the Raspberry Pi came out? A lot of people – myself included – got it, saw the Linux setup was a nightmare and stuck it in a drawer. This has been my sole driving passion for backing the Next with years of my time and effort."

Although the specification has evolved far beyond the capabilities of a stock Spectrum, the Next has remained a Z80 machine with a Field-Programmable Gate Array at its core (see the feature on the Analogue Pocket in RG 201 for the merits of using FPGA technology). This was never going to be an ARM-powered emulation station, even though that would have afforded the team a much easier ride. Henrique says: "Compromising with emulation would have made the project simpler by an order of magnitude, cheaper by at least two-thirds, and shipped to backers in half the time. But the Next is about a true evolution of the original ZX Spectrum, what we as a community of fans would have wanted Sinclair to have launched to rival the likes of the ST and Amiga. Having a real Z80 inside created incredible challenges, and these challenges brought in the enthusiasts who now drive the Next's evolution. It's far more endearing to design and implement a coprocessor to the Z80 than adding a faster or expanded layer of emulation. It might sound like a technical detail, but it's precisely these features that drew in the incredible talent; people who would not have been attracted to an emulation-based system."

The notion of 'no compromises' is also evident in the Next's external appearance where the attention to detail is admirable. The keyboard is based on the one from the Spectrum+ and familiar ports such as EAR/MIC and the edge connector sit alongside new additions like HDMI out and an SD card slot. "This is the very reason we started by recruiting Rick Dickinson," says Henrique, recalling the original Spectrum designer who sadly passed away in 2018. "At every step our major concern was how to evolve the Spectrum while keeping it rooted in the original. It was a difficult balance to strike, but nothing worth doing is easy. We started with goals such as the keyboard looking like the Spectrum+, but enabling high bandwidth typing, requiring a modern mechanism underlying the design. Everything was carefully crafted with the sole aim of capturing what made the Spectrum an iconic machine, but in line with the performance expectations of today."

The Kickstarter campaign for the Next launched in April 2017 and reached its funding goal of £250,000 within 33 hours. It then blazed through a bunch of stretch goals before a final total of £723,390 was pledged by 3,113 backers. "It was amazing," says Jim. "The month of the Kickstarter was a huge rush. We were in awe of how much interest the Next got."

"We lucked out," admits Henrique. "Between myself and Jim, we had the goal of reaching the £250,000 mark, and we were aware that this was a lofty ambition. We were also aware that anything less would undermine the economy of scale and push the Next into too expensive a price bracket. It's difficult to gauge how many people think a retro computer is worthy of an investment, of the inherent risk, of the price we had to stick to in order to produce the required levels of quality and detail."

With almost three times the initial goal raised, the team could work towards its timeline –

"I THOUGHT IT REALLY NEEDED TO BE A NEXT ITERATION OF WHAT THE SPECTRUM COULD HAVE BEEN HAD IT COME OUT BACK IN THE DAY"
JIM BAGLEY

» The hardware itself looks authentic to the Spectrums of old, and it adds some modern flourishes.

MICHAEL 'FLASH' WARE

WE TALK TO THE DEVELOPER ABOUT WARHAWK AND CODING ON THE NEXT

What's your overall impression of the ZX Spectrum Next and its capabilities?
I find the Next exciting, not only because it's great for reliving all the Spectrum classics, but also for the enhanced features. It rekindles the days of the bedroom coder – something the younger generation have missed out on, and hopefully it'll encourage people to play and create. That's one of the beautiful things about it – you can just plug it in and code, fiddle and experiment.

Tell us about the Next version of *Warhawk*.
The plan was to take my C64 version of *Warhawk* and expand upon it whilst retaining the feel of the original. The Next version could have a lot more going on during gameplay, but we feel that we would be drifting too far from the game's roots. Saying that, the later levels are more demanding on both the hardware and the player.

How do you rate the computer as a game development platform?
There's so much you can do and it's a pleasure to use. You can develop on the Next itself in BASIC, thanks to Gary Lancaster's much-enhanced implementation, or in pure assembler, or develop on a PC using one of several assemblers and Mike Dailly's wonderful CSpect emulator for testing code prior to running on hardware. The best thing is how easy it is to achieve something on the Next. Though I'm an assembler coder, the Spectrum and the Z80 were two things I'd never really coded on, and within a few days I was flying.

Are there any features that you'd like to see introduced?
Well it's human nature to want more, but the current feature set is far and above the original Kickstarter. Who knows what the future will bring? As for software, I'm just looking forward to seeing what others create to compliment the rapidly growing software library.

Is Spectrum Next development purely a hobby, or do you think you may be able to earn money from Next games going forward?
To be honest it's a mixture of things. Yes, it's a hobby for sure – all things you enjoy and do within your free time should be classed as such. Earning money from the games we create would be the icing on the cake though, and with the possibility of more Next units out there later this year, there's always the chance that it may become a viable prospect.

What's coming up next from Rusty Pixels?
The team (Lobo, Space Fractal, Jim Bagley, and myself) are always playing with ideas and beyond everything we've already announced, there are at least two more projects we cannot disclose – for now at least.

» [Next] One of the deadly bosses from the updated version of *Warhawk*.

ENHANCED GAMING

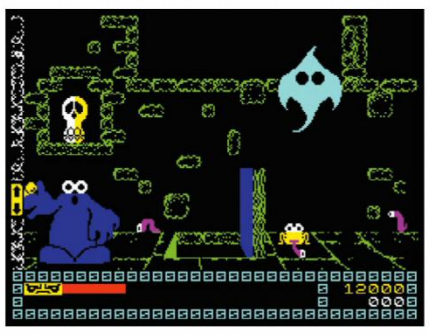
WE'VE TESTED THESE ON NEXT AND THEY ALL BENEFIT FROM A CPU BOOST

DRILLER

Incentive's Freescape games were technically brilliant but, thanks to those shaded polygons, painfully slow. At 28MHz *Diller* plays like *Doom*! This is one experience Next owners shouldn't miss – just remember to reduce the 'step' setting to 100 and the 'angle' to ten degrees for the best results.

MOVIE

This isometric adventure is often overlooked these days, but it's one of the more interesting *Knight Lore* clones with some neat touches (remember the speech bubbles?). There's a huge number of screens too, so by doubling the speed you're more likely to solve this Chandleresque crime caper.



THE TRAP DOOR

When it came to humongous sprites no one could outdo Don Priestley. All of his later 'cartoon' games, from the groundbreaking *Popeye* to the oft-forgotten *Gregory Loses His Clock*, benefit from a speed boost, but it's the adventures of Berk, Drutt and Boni we recommend you revisit on Next.

MATCH DAY II

The beautiful game should be played with passion – and pace. At its original speed Jon Ritman's hit was fine, but at 7MHz it's much more enjoyable and on a par with *Emlyn Hughes International Soccer*. At 14MHz it becomes the fast, fluid and fun arcade footy game we dreamt of back then.

You are Frodo.
You are at the entrance to a dark tunnel.
You can go east. Other possible exits are west through the red door.
Merry enters.
Pippin enters.
Sam enters.
>W.
>E.

LORD OF THE RINGS

This ambitious text adventure built on *The Hobbit* in many ways, but waiting for the Fellowship to slowly assemble after each move was excruciating. If Thorin was still around he'd be sitting down, singing about gold constantly. Yet at 14MHz escaping the Shire becomes much more enjoyable.

> "WE HAD PUT A LOT OF WORK INTO PLANNING THE PROJECT BEFORE THE CROWDFUNDING, THINKING WE HAD ELIMINATED ALL OF THE MAJOR RISK AREAS"
> **HENRIQUE OLIFIERS**

▶ board-only pledges delivered by August 2017; complete computers delivered by January 2018. The boards arrived a bit late in December 2017, but the full Next is now more than two years overdue.

"I shiver just thinking about it," says Henrique, when asked about how you actually go about developing a computer in this day and age. "There were so many unknowns. We had put a lot of work into planning the project before the crowdfunding, thinking we had eliminated all of the major risk areas. For instance, we had the main Next board already made, we had the case prototyped, the partners selected for the production of the keyboard, case, electronics, assembly and so on."

So what went wrong? "Everything," he says, shaking his head. "Every. Single. Thing. It all went wrong. From components not behaving according to their documentation, to manufacturing partners disappearing into thin air, to people suffering from serious mental health problems, to some of us not making it through. This was the hardest part – the people we lost on the way. Rick Dickinson was the most prominent loss for obvious reasons. He was incredibly professional, driven and talented, and so focused on his life and work that none of us knew about his illness. Then one day he was gone, and that was it. But Rick was not the only one. We had backers who left us and their surviving partners wanting to donate their pledges to a good cause. We had friends who had to step back due to family illness. Each one of these was a hard hit, reminding us what life is about, and putting the technical setbacks into perspective.

"The one thing we got right was to consciously choose good people to work with. They helped us along the way, offsetting our shortcomings. People like Mike Cadwallader and Phoebus Dokos jumped in and filled the huge gaps left by my time-poor management approach. Others stepped in when some of us had to depart. Phil Candy was instrumental in keeping it going when Rick passed. So many stories, and all part of the journey we had not planned for."

"We could write a book about the journey," adds Jim. "Making a computer is hard! You'd think you'd just get the parts, make the PCB, build it,

get the mould for the keyboards and cases, make those, fit it all together, and finished. No, no such thing. There have been delays but in some ways it has been worth it, because it has given us time to make NextZXOS [the system software] a lot better. We're always thinking about the end user."

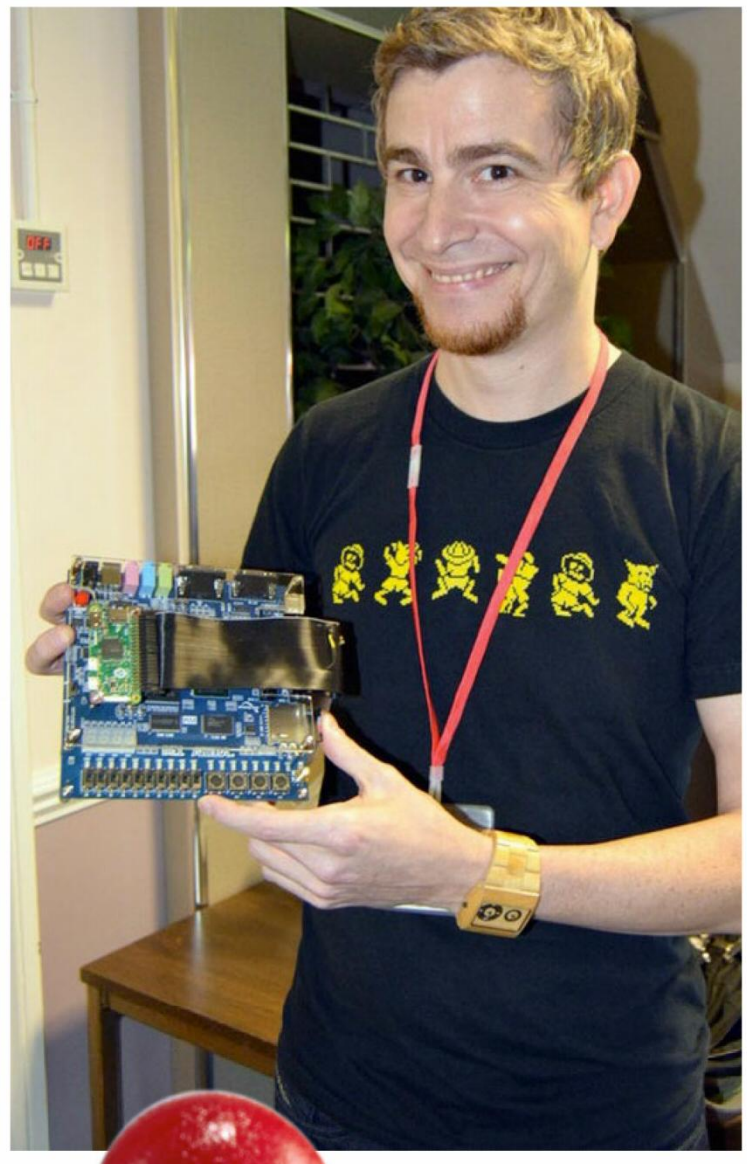
Next backers will know that issues with the keyboard have been a major contributor to the delay, but Henrique reveals this was just one of several hurdles the team had to overcome. "There were many big issues and some of them kept us awake for many nights. A critical one – not because of the problem itself, but the toll it exacted – was the RAM chips. Between Issue One and Issue Two of the board, we swapped the brand of the chips because the original ones were no longer manufactured. On paper, the new brand was exactly the same, but in practice they were not. We found ourselves with more than 420 boards ready to ship that didn't even boot. A solution didn't present itself for a couple of days, yet those two days drove the anxiety of a team member so high he was hospitalised and – rightly – never returned to the project for the sake of his health.

"Migrating the FPGA chip from manufacturers Altera to Xilinx was a huge undertaking, as it required rebooting the firmware without any familiarity with the Xilinx way of doing things. This was necessary to expand the Next's capabilities while keeping costs in check, and was a serious undertaking with huge time pressures. We also had the plastics manufacturer of the case drop the project on the day they were supposed to start carving the mould, after months of working together, without reason or warning. This set us back months. And yes the keyboard had to go through several iterations and eventually we had to adapt its design away from the original solution adopted by Sinclair of a three-layered membrane as this made the keys too heavy to press. With just two layers, we slaved for months to find a way to make the composite keys work. In the 50-plus Kickstarter updates we have made since the start of the project, there is drama in every single post."

Despite the delays, the initial goodwill hasn't dissipated as much as you might expect – and this is perhaps largely down to the openness expressed in those Kickstarter updates. "While we write them with a positive spin, we do put forward the good and the bad, and why things are the way they are," says Henrique. "Every decision we've made throughout the project was rooted in our goal of making the Next the best possible machine we could create. This is possibly why in the end we were granted a much higher dose of goodwill from the backers than we deserved. The Speccy fans are a lovely, mature group of people whose empathy sets them apart from most other groups I'm familiar with."

Being a proper computer, the Next is expandable and it will be fascinating to see where the community takes it in the future. But does the fact that it's futureproofed rule out a Next 2 further down the line? "That's a good question," says Henrique. "I don't think a Next 2 would be a good idea if you're referring to an evolutionary step with more capabilities. That would split a small community in two. But if you're thinking more of a refinement of the design while retaining compatibility, then probably yes, that's bound to happen – if not by the original team, then by another who takes the Next's materials and drives them forward in new, interesting directions."

"I'd love to do a Next portable," adds Jim, smiling. "I will look into how viable it would be to get it portable." A handheld Next is no doubt an interesting prospect, but it does give us unpleasant flashbacks to the Vega+. We wondered if that debacle compelled the team to try and make Next as good as possible, to restore people's faith in projects like this – and the Sinclair name? "That was not an angle, at least not for me," answers Henrique. "I know it would sound cool to say 'yeah, totally', but the reality is that my main concern at the time was that it could make any subsequent crowdfunded project impossible. Thankfully that wasn't the case, but there are people who didn't



» Henrique pictured with a Next prototype board in 2016. "I have a few more grey hairs now thanks in part to the project," he laughs.

» We've been using the Spectrum Next over Christmas and it really is a lovely piece of kit with lots of potential.

POWERING THE NEXT

A RUNDOWN OF THE PORTS, SOCKETS AND DOODAHS YOU'LL FIND ON THE NEXT

JOYSTICK PORT 2
A second DB9 controller port, identical to the first, there for multiplayer gaming.

JOYSTICK PORT 1
A standard DB9 port, compatible with Sinclair, Kempston, Cursor and even Sega's Mega Drive controllers.

POWER SOCKET
Accepts the 9V DC power supply unit. Note that you cannot use an original Spectrum PSU.

EXPANSION PORT
The external edge connector, the same as on the original Spectrum, and used for attaching hardware.

DIGITAL VIDEO DEBUG
Mini-HDMI port for outputting Raspberry Pi video (only available on the Next Accelerated model).

DIGITAL VIDEO
A digital HDMI/DVI-compatible video out port, for connecting the Next to suitable high definition displays.

USB PORTS
Micro USB ports reserved for Raspberry Pi usage (this is only available on the Next Accelerated model).

EAR/MIC SOCKET
A combined jack plug for attaching an external cassette recorder (or MP3 player), for loading and saving programs.

AUDIO OUT
If you're using DVI or VGA for video you can use this socket to provide stereo audio to your display.

RGB/VGA PORT
A VGA connection for compatible displays. Also doubles as an RBG video port for older monitors.

KEYBOARD/MOUSE PORT
A standard PS/2 port for connecting an external PC keyboard or mouse (emulating a Kempston Mouse).

take a bet on backing the Next because they got burnt with other projects. The goal of making the Next worthy of the Sinclair heritage was a founding pillar of the project, engraved into every member of the team. We just took it from there.

"That said, some team members joined the project with the motivation of making it an example of how things could be done, and somewhat erase the impression left by other projects. This is still very much a driver for them, not only to make a point, but to inspire others to follow suit and put the community and quality targets at the core of their projects in the future. That's quite possibly the best motivation to join a retro project such as this."

Now that the Next is ready for release, the team can look forward to seeing how the community reacts to it. For Henrique it's about harking back to that time when they first encountered the Spectrum. "I hope that when people get their hands on their Nexts, they feel as if they were opening their original Spectrum for the first time. If we capture that feeling – that moment – we know its future is guaranteed. And that's the best we can possibly hope for."

Jim is thinking longer term. "The Next is designed for the Spectrum community at its heart,

"I HOPE THAT WHEN PEOPLE GET THEIR HANDS ON THEIR NEXTS, THEY FEEL AS IF THEY WERE OPENING THEIR ORIGINAL SPECTRUM FOR THE FIRST TIME"
HENRIQUE OLIFIERS

but it's also designed to bring in a new generation of game-players and creators to it. I'd love to get to the point where we make a new generation of bedroom coders, and as new games receive more interest from gamers, this feeds the desire for them to make more games."

Games is currently one area where there are still a few question marks. It appears that none of the games that were included as Kickstarter stretch goals (*Rex Next*, *Nodes Of Yesod*, *No Mercy*, *Dreamworld Pogie* and *Wonderful Dizzy*) will be ready when the Next arrives, but we've made enquiries and they're all still in active development. Dedicated Next software is available however: Adrian Cummings of Software Amusements has five titles already out, while Jim and the team at Rusty Pixels are busy with multiple releases. "We are dedicated to making new games for the Next," says Jim. "*Baggers In Space* is ready for launch and *Warhawk* will be released maybe two weeks after that. We also have *Tyvarian*, which is a fun arcade game, and our latest game *Crowley: Beginnings* is a great platformer."

As we call time on our conversation, we ask Henrique to clear up a few matters. Will there be a second Kickstarter? "Absolutely. There are many more people out there wanting a Next. Once we get the Next shipped and the backers are happy, we'll make a second batch." Will there be a retail release at some point? "No, this wouldn't work. The Next would have to be too expensive at retail to make sense, and we are a crowd of enthusiasts rather than a company whose primary concern is to profit. It's just not what we know how to do well."

Could there be an official Next software range? "Not really, as it's an open platform. We don't want to swing the scale in our favour. Instead we'll promote other people's software. We'll surely sell some software on the Next portal, but it won't be 'official' as such as it could undermine third parties working to sell their own titles." So will any software come bundled with the machine? "Yes, there are a few games, demos and utilities bundled with the Next. Some oldies, some new stuff, some remakes. It will come with quite a lot of things to try and play out of the box."

Finally, and perhaps most pertinently, does Henrique have a message for all those backers who are about to receive their Nexts? "I need to thank them for their unwavering support and patience with our shortcomings. It has been a much longer road than we anticipated, and they could have rightly made our lives a lot more difficult. Yet they kept us going. Without their support the Next would have been a fraction of what it has become. I truly hope that the Next lives up to every backer's expectations, and that it becomes the first step of a very long relationship." ✱

NMI BUTTON
The hardware interrupt button. Mimics the Multiface's red button and provides lots of useful functionality.

SD CARD SLOT
Takes an SD card on which system files and software are stored. The Next will not boot without a card inserted.

RESET BUTTON
The trusty reset button. Push briefly for a soft reset, hold longer for a hard reset.

DRIVE BUTTON
Launches the divMMC menu when the esxDOS operating system is enabled.

Strider 2

A SEQUEL TEN YEARS IN THE MAKING

» ARCADE » 1999 » CAPCOM

If you've been following the magazine for the last 14 years you're probably aware that I'm a fan of a little game called *Strider*. I've lost count of the times I've been able to wax lyrical about why it left such an impact on me, so instead I'll focus on it's enjoyable sequel. And no, I'm not talking about that atrocious 1990 offering from US Gold.

Strider 2 was released by Capcom in 1999, ten years after the original. I can't remember when I first played it in an arcade, but I'm pretty sure it was in the early Noughties. In fact, I may have experienced it on the PlayStation before I came across the arcade version. What I do recall is that a lot of people seemed to dismiss it at the time, probably because it wasn't a 'proper' 3D game (only the backgrounds were 3D). I was far from disappointed with my discovery, though, and while it lacked the sheer spectacle of the 1989 original, there was still plenty to enjoy about Capcom's sequel.

One of the best things about *Strider* was how it made you feel like you were invincible, fully capable of taking on the armies of Grandmaster Meio single-handedly. Capcom's sequel amplifies that feeling of power enormously, allowing you to effortlessly slice through your foes and giving you access to new moves that turn Strider Hiryu into an even deadlier fighting force. While the new bosses he faces aren't quite as bizarre as the mayors he mashed in the original game, some of them do manage to stick in the memory, including a huge gun-equipped mammoth and this fearsome foe, which shares more than a few similarities with *Strider*'s very first boss, Ouroboros.

Ultimately, it's the sheer sense of empowerment that makes *Strider 2* so much fun to play and while it was never going to wow me in the same way the original did, it became only a handful of games to stay in my tiny PlayStation collection. ✱

TIME 02'26
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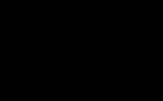
ULTIMATE GUIDE:

MARBLE MADNESS

AMONG THE THRONG OF SHOOT-'EM-UPS AND FIGHTING GAMES THAT OFTEN DOMINATED ARCADES IN THE EIGHTIES, THERE WAS ONE ODDBALL MACHINE THAT ALWAYS STOOD OUT. RETRO GAMER GOES SPHERICAL FOR THE FABULOUS ISOMETRIC GAME THAT HELPED KICKSTART THE CAREER OF AN INDUSTRY LEGEND

Words by Graeme Mason



ACID PUDDLE

PUSHER

BIRD

BROKEN MARBLE

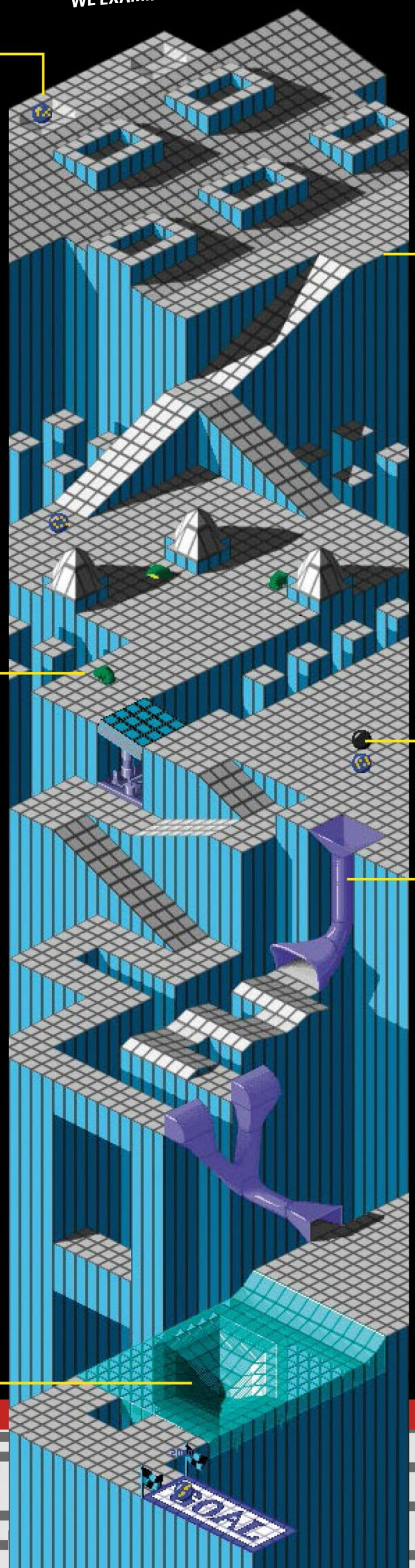
BARRIER

BEGINNER'S LUCK

WE EXAMINE MARBLE MADNESS' RELAXED SECOND LEVEL

1984 was a turbulent time for Atari. The saturated American market had driven its profits down, and it was forced into a split during the latter half of the year, with its home electronics business sold to Commodore as the arcade department rebranded to Atari Games Inc. The arcade division had still been profitable, despite Atari's overall woes, and *Marble Madness*, released in the same year as the sell-off to Commodore, firmly continued that tradition. Despite the similarity in concept and genre of its many arcade games, originality was in demand at Atari, a principle that produced unique methods of control that could be utilised within a bespoke coin-operated unit. Designer Mark Cerny, a 17-year-old arcade game fan, freshly installed at his dream job within the legendary company, came up with not only an original design, but also one that would require that sought-after distinctive control method.

Set over a mere six levels, *Marble Madness*' apparent brevity is supremely deceptive. Inspired by the arcane randomness of many a miniature golf course, each level presents a downward-scrolling landscape over which the player must edge their way through, avoiding hazards and precipitous drops as they make their way to the finish line. The levels are allotted a strict time limit, and there are no lives in *Marble Madness*, no spare balls waiting in the wings to be deployed upon losing the current marble. Instead, valuable seconds are wasted each time the ball magically reforms on the table following a mishap, ready to recommence its descent.



This is the start point. In a two-player game, both player marbles sit here in their own dimples, side-by-side, ready to descend.

The first major risk on this level. Slip down the start hill too fast and it'll be off the edge and into the abyss for you.

The first hazard appears in the form of these slinkies that pounce on the marbles should they get too close. Fortunately, there's plenty of scope for evasion here.

This is also the first appearance of the Black Steelie, although again there's plenty of room to outfox it.

Here the player has the choice to either take the funnel down to the lower part of the level or negotiate the slopes to the left.

The home straight is in sight! All that's left is to work your way around this black hole vortex that sucks in any marbles that are foolish enough to get too close.

END FLAG

MASTER THE MADNESS

THESE TIPS WILL HAVE YOU ROLLING MERRILY IN THE AISLES, AND EVERYWHERE ELSE FOR THAT MATTER

SPEED IS THE KEY

On the surface, *Marble Madness* rewards those who risk plummeting to their doom in order to achieve a quicker time. But in reality, true masters will realise that for every time their marble breaks, valuable points are deducted, should you manage to complete the game. The balance between care and speed is vital.

BEWARE THE BLACK STEELIE

While bumping the enemy black marble from the map nets the player a nice 1,000-point bonus, there's an inherent risk to attempting this manoeuvre. Apart from the time used in trying to collide with it, there's the risk it may send your own marble into the void.

DANGEROUS DROPS

While drifting off *Marble Madness*' level edges and plunging into the dark depths below is bad enough, even its internal cliff faces are often deep enough to shatter the vulnerable orb. Extra care is required when negotiating any platform that involves anything more than the shallowest fall.

IT IS A SILLY PLACE

***Marble Madness*' penultimate level turns things upside down – literally. Now the marble (or marbles) must travel up the map to the goal at the top, and the reversed direction can make things very tricky. Don't be ashamed to take your time a bit more during this odd stage.**

I SLINK THEREFORE I AM

From stage two onwards, these small green tubes prowl, looking to pounce on innocent passing marbles. Slow and ponderous, they nonetheless leap skilfully into the air, mouth wide open should you stray too close. You best dash past these as quickly as possible once you spot an opening.

Presented in a clinical and straight-edged isometric display, *Marble Madness* is visually influenced by the works of famous Dutch artist MC Escher, most notably his works *Relativity* (1953) and *Waterfall* (1961), both of which draw on a strong mathematical element, combined with the idea of impossible landscapes. As abstract as these extraordinary paintings, *Marble Madness* places the player's sphere at the top of the screen with no reason or background given to the task that awaits this perfectly round object. Anyone who designed a marble run back in the Eighties will recall the peril of planning and constructing such a layout, and Mark and his colleague, Bob Flanagan, placed real-life threats into their mazes, together with a few unnatural problems from their own imaginations.

In *Marble Madness*, it's not just plummeting drops and a stern clock that test the player's reactions and skills. While level one, the practice race, is misleadingly easy and devoid of enemies, each subsequent stage ramps up the cunning to Machiavellian levels. Enemy marbles, jet black in appearance, and known as 'Black Steelies', home in on the player and bounce off them, sending your marble careering towards its doom should you not be suitably alert. Tubular marble munchers patrol from level two onwards, resembling emerald slinkies on a mission to swallow a marble whole. There's more green danger in the form of acid puddles, surprisingly mobile, and also lethal to the brave marble. Antique-style vacuum cleaners protrude from level four, smashing the marble into pieces should it be sucked too close, and hammer-like arms lay ▶

COLUMNS

» [Arcade] Only the most agile and dextrous rollers will make it onto the high score table.

» [Arcade] The two opposing marbles start opposite each other in two-player mode.

» [Arcade] The beginner's stage is a mere taster for what is to come.

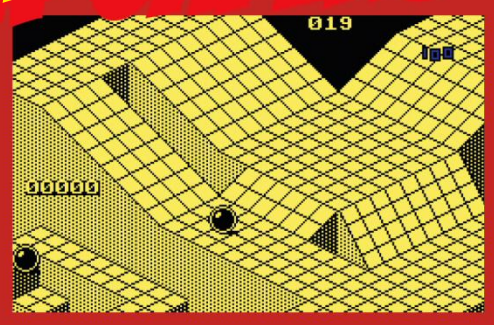
CATAPULT

Conversion Capers

MARBLE MADNESS WAS PORTED TO A HUGE ARRAY OF HOME SYSTEMS

Amiga

One of the earliest arcade conversions to the Commodore 16-bit computer, and a game that showed off how the machine could effectively recreate arcade products. Replicating the smooth angular graphics perfectly, it's a great conversion, and even better in two-player mode.

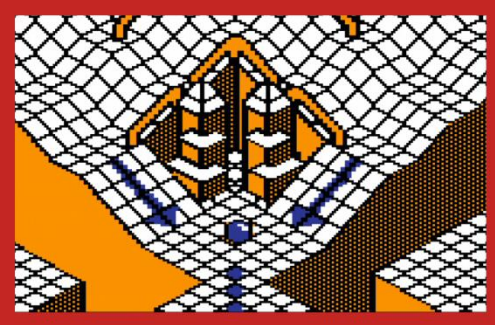


Amstrad CPC

Boasting the same natty construction kit as the Spectrum version (and also written by John F Cain), here we have no music and slightly more colourful graphics. Sadly, all the other deficiencies are present, including problematic scrolling and collision detection.

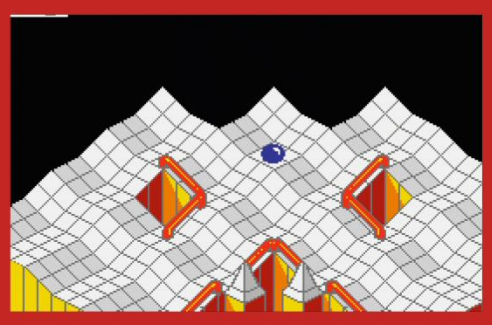
Commodore 64

Converted by Will Harvey and published by Ariolasoft/EA, this version is notable for including a hidden water level that can only be completed by two players working in tandem. Otherwise it's a competent port hampered by some irritating scrolling.



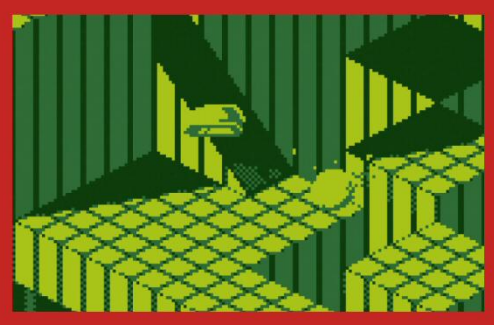
Apple II

Coded again by Will Harvey, *Marble Madness* clearly served as an influence on his later games such as *The Immortal* and, especially, *Zany Golf*. This version looks good, but is clearly lacking in speed. As with the C64 game, it includes the hidden water level.



Atari ST

Both graphics and gameplay are far inferior to the Amiga version, and there's an ongoing impression that due care hasn't been taken. An accurate rendition of the arcade game should have been the minimum requirement, considering the power of the computer.

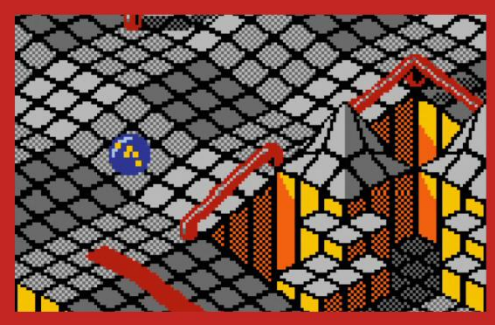


Game Boy

Feeling like a port of the NES version, rather than the original, this conversion also lacks the sixth level, making a short game even shorter. The zoomed-in display makes negotiating the levels a tad more frustrating than it should be. Nonetheless, it flows nicely.

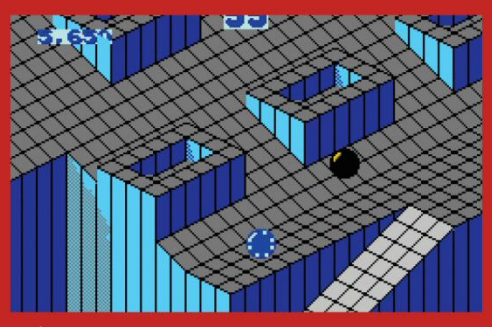
Game Boy Advance

This appeared on the GBA as part of a double bill with another arcade conversion, *Klax*. Unfortunately, it controls poorly (a critical failure) and lacks many elements from the original, including three – yes three – levels from an already-short game.



Game Boy Color

While it includes all six levels from the arcade game, and replicates them with a good degree of success, this is a by-the-numbers conversion. Mix in some slowdown in later levels and the lack of multiplayer, and you're better off sticking with the Game Boy port.

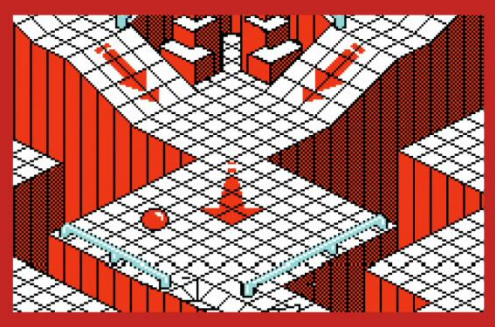


NES

This competent conversion from Rare is quite similar to the arcade original, and is helped over other versions thanks to its eight-direction pad. Pressing the A button also increases speed, which is helpful when trying to negotiate tight and steep corners.

Sharp X68000

Appropriately for its name, the Japanese home computer version of *Marble Madness* presents some exceedingly precise and clean lines, in addition to a mysterious-looking player marble. It plays well, too, and only lacks a little in the audio department.



PC

If you owned a PC in the Eighties, chances are games were not your top priority. This DOS port throws in the usual horrific and unsubtle PC hues, beepy music and sluggish controls, the latter the most damning shortcoming in a game that often requires precise and quick controls.

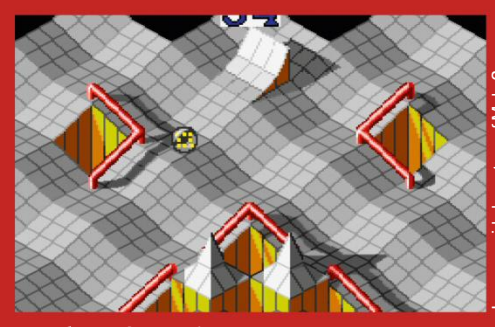
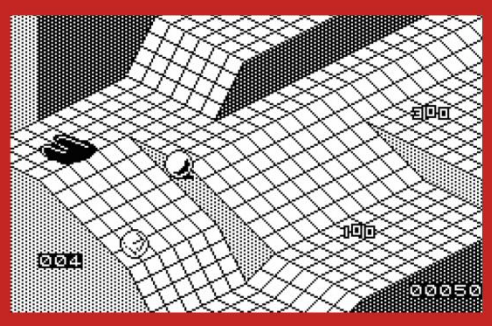


Image provided courtesy of MobyGames

FM-Towns

Despite a seemingly accurate simulation of *Marble Madness*' graphics and gameplay, it's the FM-Towns soundtrack that most shines through. Beautifully arranged, it's well worth checking out on YouTube for fans of the game and videogame music in general.



ZX Spectrum

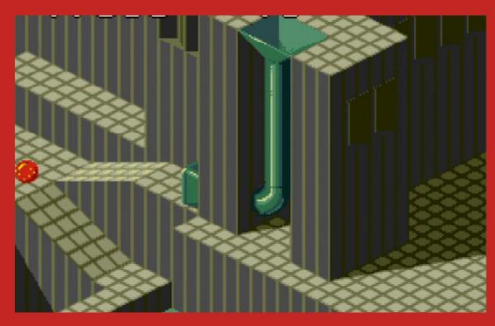
While the Spectrum's sharp display looks good, it feels like something is off here, despite the presence of a neat course designer. Maybe it's the iffy collision detection or the slow gameplay. Still, the designer is easy to use, and it's always fun to create your own courses.

Game Gear

It's a similar problem to the Master System port here – the lack of a decent d-pad makes negotiating the intricate levels more tricky than it needs to be. Another zoomed-in display also makes it harder, and it adds up to an overall frustrating experience.

Master System

While graphically excellent, the Master System's clumsy pad lets the side down here. Accurate otherwise, it's a shame the boat wasn't pushed out in terms of extra levels, as that would have gone some way to making up for the difficult controls.



Mega Drive

This conversion from EA is as near-perfect as you'd expect from a console that rightly had an excellent reputation for arcade ports. All the levels and music are present but perhaps the absence of any further extras might be a disappointment to some.

ICE FLOOR

Q&A BOB FLANAGAN

WE CHAT TO THE COCREATOR OF MARBLE MADNESS

» Bob has a number of classic games in his credits, including a string of sequels for *The Sims*.

What was your role on *Marble Madness*?
Gameplay and base ROM programmer. I helped write much of the base ROM reusable code and most of the self-test screens for the System 1 hardware, and all the specific screens for the game. I also wrote the attract mode and sequencing, gameplay scripting used for the enemies, gameplay physics, collision detection, controller input and so on.

What did you think of the overall design?
I thought it was creative and unique, and was very excited when Mark [Cerny] asked me to work with him and then subsequently see his design.

What was it like working with the isometric format?
It actually made it way easier to do the math to translate the object positioning from three-space to screen space in order to make them look attached to the playfield. Also, the simplified math meant performance benefits too – perspective would have been much more costly.

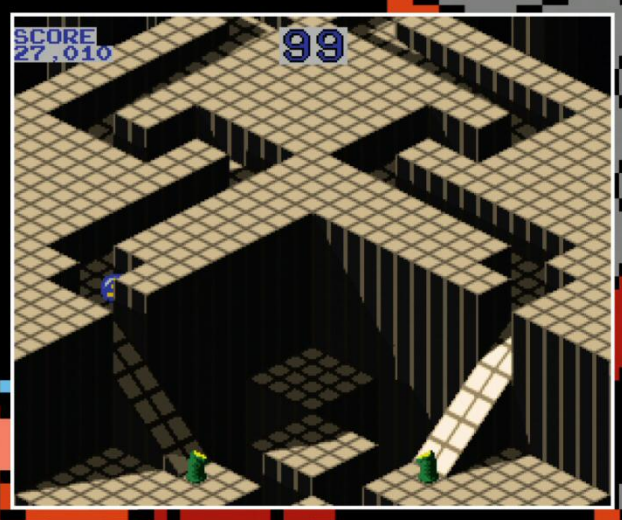
Having said that, was there anything in Mark's design you couldn't achieve?
The moving wave at the end of the third playfield and the moving patches at the end of the sixth were definite issues that Mark spent a lot of time with for functionality, graphics, space and runtime performance. But we were able to make it work, anything else was probably more because of time rather than difficulty.

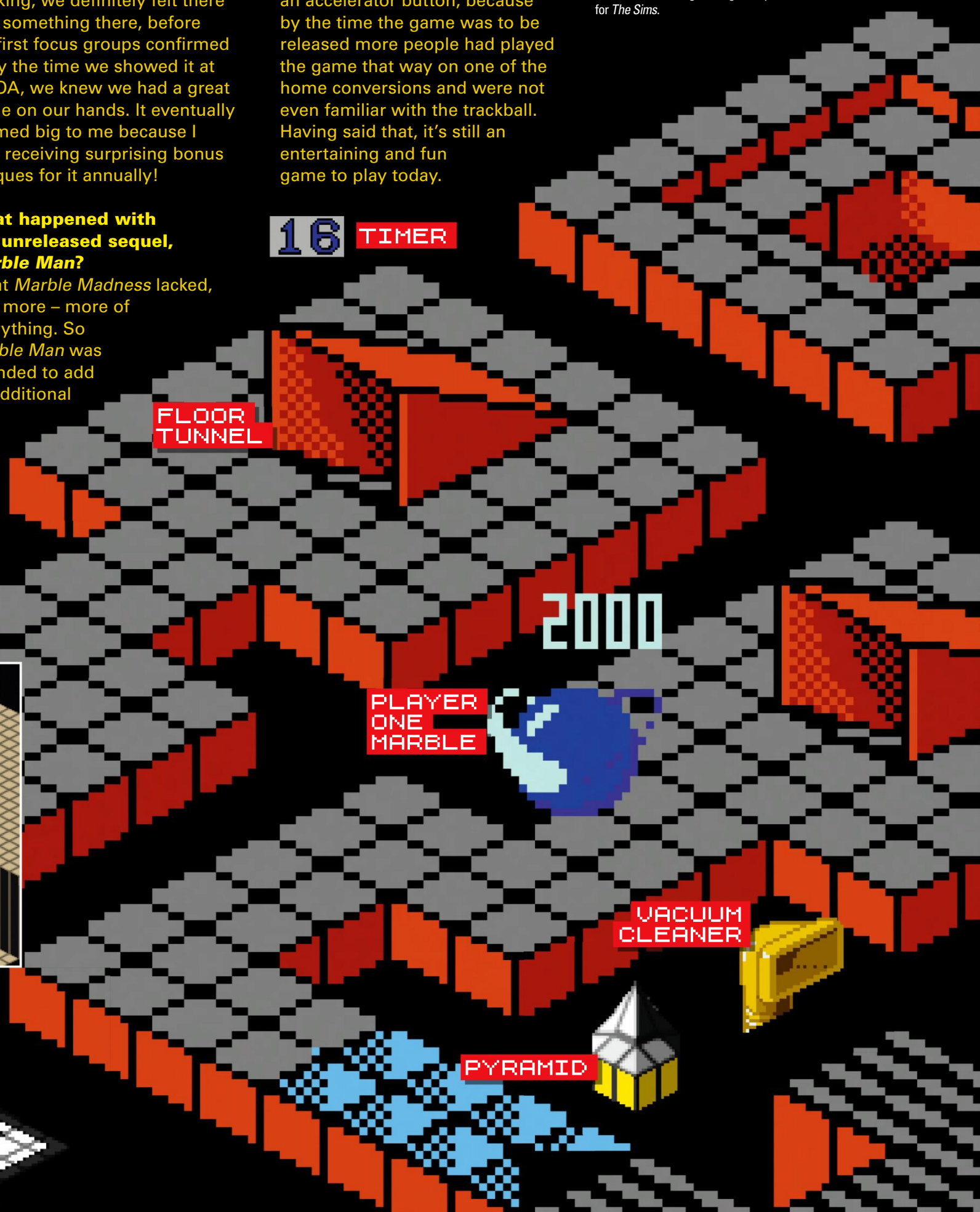
When did you start to get excited about *Marble Madness* and think it could be a big hit?
Once we had the two-player race working, we definitely felt there was something there, before the first focus groups confirmed it. By the time we showed it at AMOA, we knew we had a great game on our hands. It eventually seemed big to me because I kept receiving surprising bonus cheques for it annually!

What happened with the unreleased sequel, *Marble Man*?
What *Marble Madness* lacked, was more – more of everything. So *Marble Man* was intended to add an additional player, give more playfields and characters and add new gameplay via the pinball levels.

Sounds cool – why didn't it get beyond the prototype stage?
That was my fault for two reasons. Firstly, I made the choice to target too young an audience with the name and character, I should have kept it abstract like the original. Secondly, I switched from trackball to joystick with an accelerator button, because by the time the game was to be released more people had played the game that way on one of the home conversions and were not even familiar with the trackball. Having said that, it's still an entertaining and fun game to play today.

» [Arcade] Devious acid puddles await the brave marble on stage three.

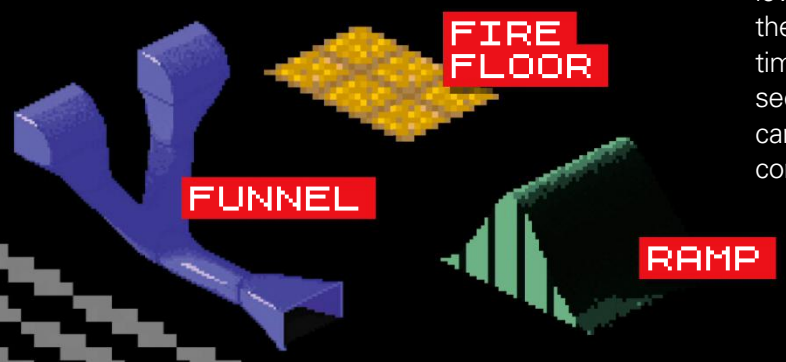




▶ in wait, ready to punch it off the platform and into the abyss. If you've managed to make it to level five, there are new enemies in the shape of rapid birds that charge across the screen, stabbing at the marble with their beaks, and familiar foes, black marbles and marble munchers, only smaller, quicker and no less dangerous. Incidentally, those black marbles are as vulnerable as the spherical star, and they can be bumped off the platforms, landing the player a cool 1,000-point bonus. There's also an incentive to complete each level as fast as you can: every second remaining upon completion earns 100 points, and there are extra points for when the marble moves quickly. With the exception of the transition from level one to two, any time left over is added to the next level's timer, and bonus points are scored for completing a level without destroying your marble, along with 2,000 or 4,000 for using a tube or tunnel. More worried about time than points? Then the magic wand, which appears randomly throughout the game, is something to watch out for.

Naturally, *Marble Madness*' courses, each nefariously plotted, are a hazard as well, and arguably the more testing. While the pipes that link different altitudes may appear harmless enough, their habit of jettisoning the marble at speed onto the level below can often lead to a shattered globe.

» [Arcade] Stray too close to these large vacuum spouts and the marble is shattered.



So too the catapult, a conveniently rounded device that launches the marble to another section of the maze, temporarily stunning it in the process. But these mechanisms pale in comparison to threats such as a green floor that rolls the player around and columns that rise up, thrusting you up into the air to land either stunned, or off the map, wasting more precious seconds. And by level six, the ultimate in deviousness, there will be three more types of floor to flummox any marble daring to venture further. Ice and fire blocks slow and confuse respectively, while any regular segment of surface can disappear without warning – it's the definitive task designed to test reflexes and patience under extreme pressure.

Each *Marble Madness* machine houses two trackballs and no other controls, such is its simplicity. Along with originality, Atari was determined to include simultaneous two-player action with as many of its arcade games as possible. With a few tweaks, it was shoehorned into *Marble Madness* as the two players compete head-to-head (one blue marble, the other red), with the trailing marble destroyed and replaced next to the leader's, together with a time penalty until the winner clocks in with the quickest time. The game's dotty music and sound effects accompany both single and two-player games, underscoring the eerie atmosphere.

Often minimalistic due to technical constraints, *Marble Madness* has an ethereal quality that gives it an age-defying beauty. With its realistic physics guiding the marble across each screen, mastering the trackball (spin harder to gather speed) and the inherent momentum is a key skill to progress across the game's tricky levels. It was a challenge accepted by many, which led *Marble Madness* to becoming one of the biggest-selling arcade games of 1984 and 1985. Home conversions followed over the course of several years; notable ports include a Spectrum/Amstrad game that included a level editor, allowing players bored of the existing levels to design their own; a Nintendo Game Boy version that permitted play against a friend using the multi-link cable; and a Sega Mega Drive cart, released seven years later, with a red instead of blue lead marble.

These mere six slivers of sharp drops and acute bends are a compelling race against time, much loved 36 years after first rolling into arcades. With the final score assuaged by 1,000 points for each time the marble breaks, yet bolstered by spare seconds, it's a fine balance between speed and care for those chasing a high score. Dare you compete in the ultimate race? ★

THE SINCEREST FORM OF FLATTERY

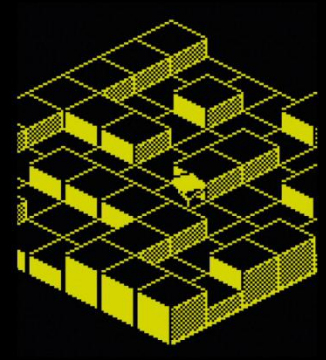
MARBLE MADNESS INSPIRED A WHOLE NEW GENRE OF GAMES THAT, UM, PAID HOMAGE TO ITS UNIQUE STYLE AND GAMEPLAY

GYROSCOPE
1985

Controlling the titular balancing implement was the major change here as *Gyroscope* echoes *Marble Madness*' isometric oddity. Publisher Melbourne House would go on to release the official version of the game a year later on ZX Spectrum and Amstrad CPC.

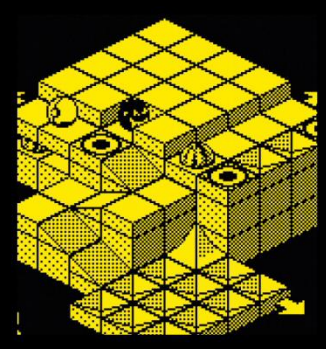
SPINDIZZY
1985

Like *Gyroscope*, *Spindizzy* features a delicate tool, balancing precariously through many of its difficult screens. Actually a space exploration craft named GERALD, *Spindizzy* is an extremely tough game with many platforms and obstacles akin to *Marble Madness*.



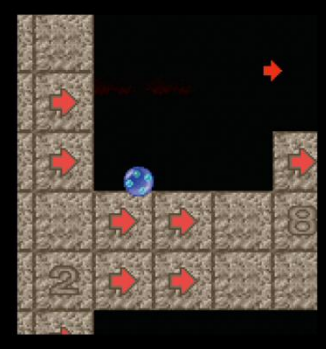
BOBBY BEARING
1986

This monochromatic game may favour a slower tactical approach over the speed of *Marble Madness*, yet there's definitely a strong vein of the Atari hit running through this tale of the titular bearing and his lost family.



ON THE BALL
1992

Actually a home port of the Taito arcade game *Cameltry*, *On The Ball* is seemingly inspired by *Marble Madness*' direct aim of helping a ball travel downward to escape a maze. Only here, you control the maze, rather than the ball.



SUPER MONKEY BALL
2001

This game features cute monkeys inside see-through balls with the player attempting to guide them down through a maze to the goal line. While completely different graphically, it's a clear nod to *Marble Madness*' original concept.

ARCHER MACLEAN'S MERCURY
2005

While lacking a spherical star, *Mercury* employs the same principal as *Marble Madness* – guide the ickle puddle down the game maps, avoiding hazards of design and enemies placed on each screen.

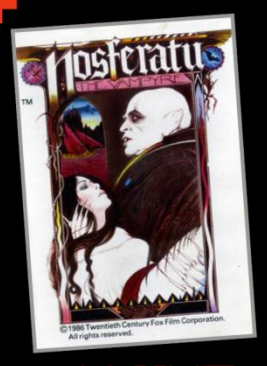
THE MAKING OF

Nosferatu

THE VAMPYRE

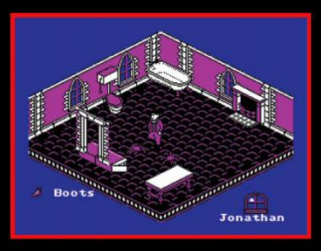
After Graham Stafford divided critics with the puzzle-based NEXOR, a film licence gave him a chance to reuse his game's isometric engine. Retro Gamer learns how Graham's story-led follow-up adapted the cult horror movie Nosferatu The Vampyre

WORDS BY RORY MILNE



IN THE KNOW

- **PUBLISHER:** PIRANHA
- **DEVELOPER:** GRAHAM STAFFORD, DAVID FISH
- **RELEASED:** 1986
- **PLATFORM:** AMSTRAD CPC, VARIOUS
- **GENRE:** ADVENTURE

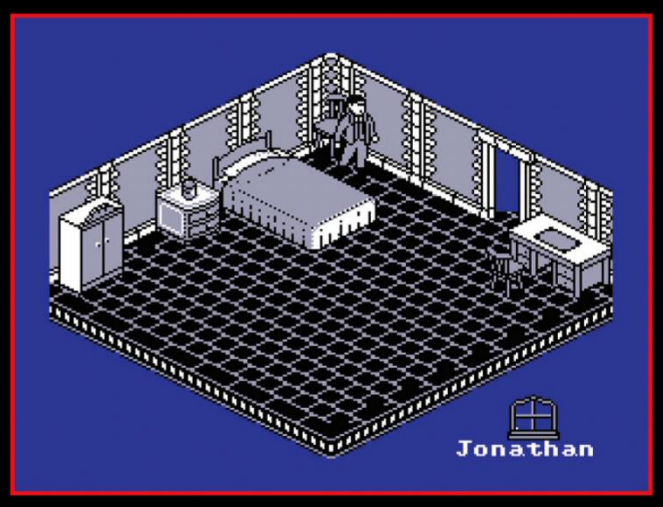


» [Amstrad CPC] Much of *Nosferatu*'s castle is crawling with deadly creatures, which you can dispatch with collectible objects.

Although previously known for its educational software, 1986 saw Macmillan Software establish the games division Piranha. A movie adaptation was chosen as one of its launch titles, and it was contracted out, but the label bucked the trend of licensing blockbusters, as former Design Design director Graham Stafford explains. "We did two or three games for Piranha," he remembers, "and one was *Nosferatu The Vampyre*, which I wrote. I have no idea why Piranha chose to do *Nosferatu*, other than it was known. But I think it was very much dipping its toe in the water, whereas a publisher like Ocean was obviously full-on."

But despite its caution, Piranha took an active interest in *Nosferatu*, and it suggested revisiting Graham's previous game *NEXOR*'s look without aping its gameplay. "*NEXOR* was very much a puzzle game," Graham reflects, "and I think Piranha was looking for more of a narrative type of a game. But an awful lot of the code behind *Nosferatu* was similar to *NEXOR*, so myself and artist David Fish could spend most of the time working on the look of the game and coming up with gameplay."

In particular, *Nosferatu*'s gameplay was defined by its use of bespoke challenges, such as perfectly positioning a ladder in a library to get access to a room above. "Because we had time to write gameplay elements rather than the framework of it, we had the luxury to do two or three very specific mechanics for certain parts of the storyline," Graham recalls, "and the library mechanic was a specific thing that we wanted to do."



» [Amstrad CPC] *Nosferatu*'s adventure starts with the player character Jonathan Harker locked in the titular vampire's castle.

Other narrative-led challenges followed, involving mechanics such as lighting lamps to illuminate gloomy rooms and making stakes by smashing up wooden chairs with axes. "We felt the wooden stakes were a very vampire-ish thing," Graham notes, "and then the dark rooms, well it was a dungeon, so it seemed fairly obvious. I don't think they were overly original gameplay elements, and frankly, in terms of turning the lights off, it was quite easy to do, but I think they were quite appropriate for the story."

The initial weapons chosen for *Nosferatu* were equally appropriate for its vampire storyline, and further armaments were added to combat the game's rabid animals. "You had different weapons to kill different things," Graham remembers, "and I think once we had gone down that avenue we milked it for all it was worth. It was all down to discussions with the Piranha guys. It started with the garlic mechanic, and crosses were another weapon, and then because those gameplay elements worked quite nicely we decided to do a few more of them."

A quite different gameplay element was devised for *Nosferatu*'s second stage, where players could alternate between three characters, although two had identical abilities. "I don't think there was a great deal of thought put into it," Graham points out, "and there was only a very limited amount of different stuff that we could do. It would have been fantastic if we had gone the *Head Over Heels* route, but our thought processes weren't that advanced."

Of course, *Nosferatu*'s second load also featured the titular vampire, and like the film, Lucy Harker would have to lure him to her bedroom

DEVELOPER HIGHLIGHTS

2112 AD
SYSTEM: AMSTRAD CPC, VARIOUS
YEAR: 1985

NEXOR (PICTURED)
SYSTEM: AMSTRAD CPC, VARIOUS
YEAR: 1986

NOSFERATU THE VAMPYRE
SYSTEM: AMSTRAD CPC, VARIOUS
YEAR: 1986

» Graham Stafford based *Nosferatu The Vampyre* on his previous game, *NEXOR*.

» [Amstrad CPC] Lucy's core objective is to lure Nosferatu to her bedroom and keep him there until daylight.

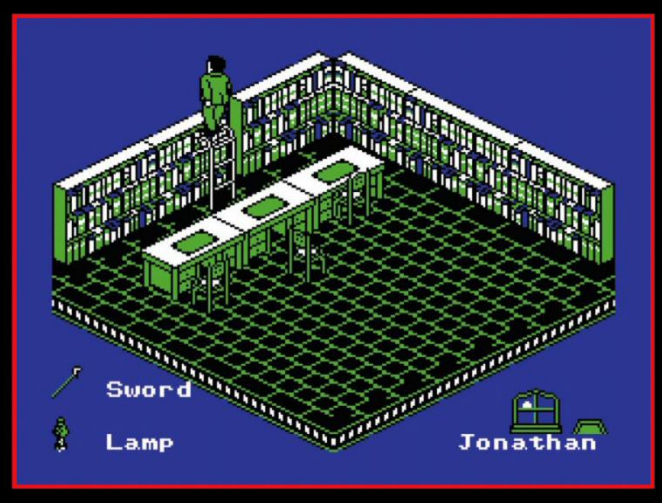
and keep him there until sunrise. "Some of that was pretty damn tricky to get right," Graham says of using Lucy as bait. "If Nosferatu followed from too far a distance, then when Lucy went from room to room he wouldn't go through, and if he followed her too closely they would appear in pretty much the same place, and it would be an instant game over."

After ironing out *Nosferatu*'s chase scenes, Graham attended a lavish launch for his game in London, and on release it received far better reviews than its predecessor. "It doesn't surprise me that *Nosferatu* reviewed better than *NEXOR*," Graham admits, "because the gameplay side of that was *very* rushed, which is why I then flipped the other way with *Nosferatu*. But *NEXOR*'s loss was *Nosferatu*'s gain, and I believe that Piranha was reasonably satisfied with the sales."

"Because we had time to write gameplay elements rather than the framework, we had the luxury to do specific mechanics for parts of the storyline"
Graham Stafford"

Graham concedes that his memories of *Nosferatu* have faded, but with the game's innovations now fresh in his mind, he feels pride. "Having dug out some of the gameplay from nearly 35 years ago I'm quite pleased with myself," Graham beams. "There was certainly more source material there that we could have used, but I think Nosferatu was quite clever, both in terms of the gameplay and its look." ✱

» [Amstrad CPC] You need a lit lamp to safely navigate *Nosferatu*'s dungeon, which is otherwise pitch black.



» [Amstrad CPC] Exact positioning of the ladder in *Nosferatu*'s library gives you access to the attic above.

CONVERSION CAPERS

THE PROS AND CONS OF THE THREE VERSIONS OF NOSFERATU

AMSTRAD CPC

Nosferatu is very obviously an Amstrad original; one look at its glorious four-colour visuals makes that clear. Its lively in-game chiptune also perfectly suits the CPC. Beyond aesthetics, the Amstrad *Nosferatu* delivers story-led gameplay based around bespoke mechanics, such as a dark dungeon that requires a lit gas lamp to explore, a library attic accessed by climbing a perfectly positioned ladder and a vampire-infested village where you arm yourself with stakes made by chopping up chairs.

ZX SPECTRUM

Thanks to the limitations of the hardware, the Spectrum *Nosferatu* suffers in comparison to the original. Where the Amstrad version has multihued stages this port has single-colour levels, and where the original has a multichannel soundtrack the Sinclair iteration has single-voice in-game music that slows down and speeds up depending on how much is happening on the screen. That said, the Spectrum port is identical to its CPC inspiration in terms of gameplay and level design.

C64

Quite sensibly, the C64 version of *Nosferatu* uses the machine's less colourful high-res graphics mode, which allows it to reproduce the original's visuals perfectly, albeit with the restriction of one main colour per stage. The Commodore *Nosferatu* improves slightly on the Amstrad's in-game tune, although it's more sedate. In terms of gameplay, the C64 port accurately replicates the CPC original's mechanics and challenges, but there's some slowdown in the levels where there's a lot going on.

THE HISTORY OF THE STRIKE SERIES

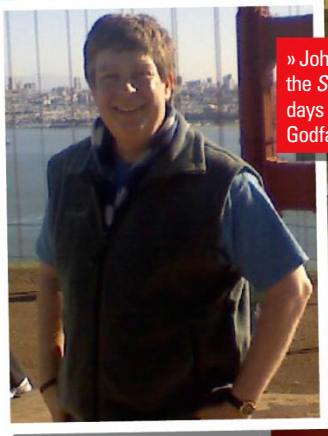
FROM THE SANDS OF THE MIDDLE EAST TO THE GREEN EXPANSES OF A FICTIONAL ASIAN COUNTRY, THE STRIKE SERIES CUT A VIOLENT SWATHE ACROSS A MULTITUDE OF FORMATS IN THE MID-NINETIES. RETRO GAMER TAKES A LOOK BACK AT THIS BRIEF, YET REVERED QUINTET OF ACTION GAMES

WORDS BY GRAEME MASON

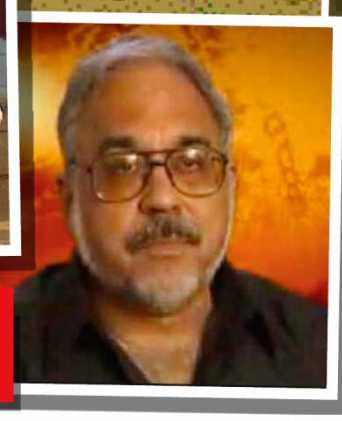
» [Mega Drive] Destroying the enemy airbase in *Desert Strike*.

The story of the *Strike* series begins not 27 years ago with the release of *Desert Strike*, but in the late Seventies, at a government installation. Having graduated from university with a PhD in engineering, a young man by the name of Mike Posehn was working at Lawrence Livermore, a nuclear weapons lab in Northern California. Impressed by the technology on show, Mike invested in one of the very first personal computers, a Sol 20, and began writing software in his spare time. "I wrote a few productivity programs for the CP/M operating system and sold them via mail order," he begins. "One was called Milestone, the first project management software for personal computers, and it was so lucrative I quit my job and became an independent software author – what a concept!"

Mike's company grew and, when it began developing one of the first PIMs (personal information manager), attracted interest from a small private company named Electronic Arts. "They were searching for a product like Brøderbund's Print Shop, so they bought my company and released that product of mine, which they called Get Organized!" Sadly, the finished program was not up to EA's expectations, but fortunately Mike and his colleague Tom Casey, had a plan B. "At that time the Amiga computer was being developed, so Tom and I wrote Deluxe Video, the first desktop video program, which EA did publish." With Deluxe Video making a pile of money for the publisher, Mike had his foot in the door, and his thoughts turned to the entertainment sector, an area which Electronic Arts was understandably keen to extend further into. Having begun work on a flight simulator ("that was okay, but a little dry and boring"), the developer was summoned to a meeting with EA's CEO and founder. "Trip Hawkins asked me to take a look at *Choplifter*, and do something along those lines. We both liked the way you could rescue little guys with your helicopter, and I also liked the isometric point of view." Into this isometric viewpoint came the vehicles that would define the series, along with a number of other factors. "The look and feel of the helicopter and ground vehicles were influenced by the Matchbox toys I loved and played with as a kid," Mike notes.

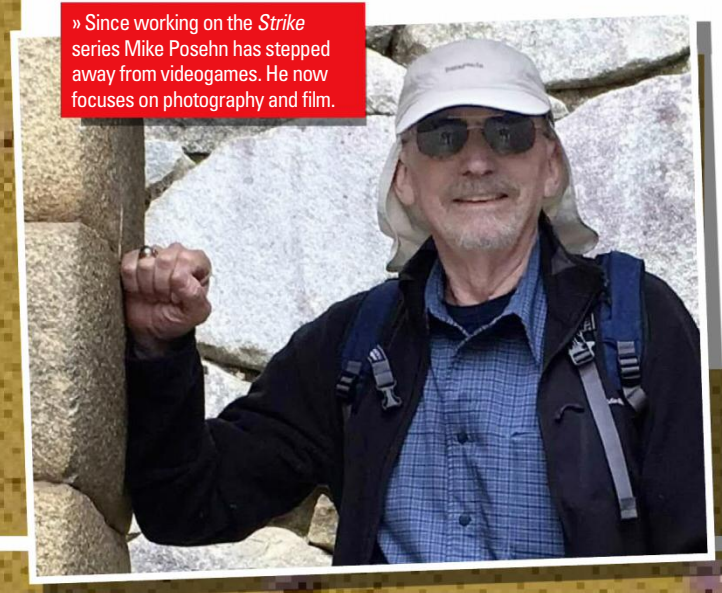


» John Manley started work on the *Strike* series from the early days and is nicknamed 'The Godfather Of *Strike*'.



» Michael Becker went on to work on some blockbuster games after his work on the *Strike* series, including *Battlefield 2* and the *LOTR* games.

Working on that same flight simulation as Mike had been was EA's John Manley. "I was a member of a production group that was starting to develop games for a new PC platform that IBM was prototyping," recalls John, "and one of our first efforts was a flight simulator game project. But when the team decided to support the Sega Genesis console instead, this early prototype was quickly retooled into an isometric game with an omnidirectional scrolling playfield." With the Mega Drive/Genesis as



» Since working on the *Strike* series Mike Posehn has stepped away from videogames. He now focuses on photography and film.

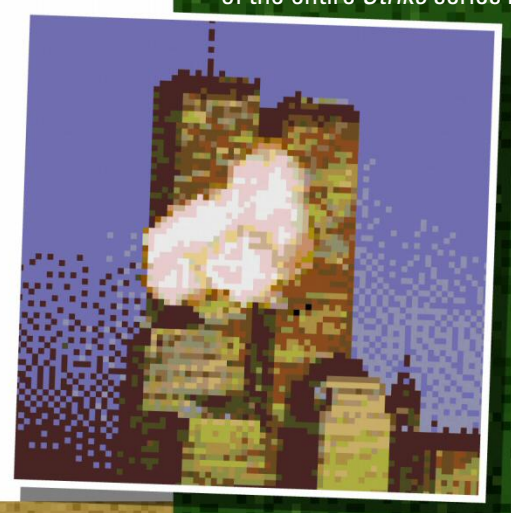
ART IMITATING LIFE

FROM THE MIDDLE EAST TO NEW YORK, THE STRIKE SERIES HAS ECHOED MANY CONFLICTS AND PERSONALITIES BOTH INTENTIONALLY AND BY COINCIDENCE

Ever since its inception, one of the *Strike* series' mantras has been the close affiliation with real-world events, a trend known as 'ripped from headlines' by the development teams. With *Desert Strike* originally devised while the crisis in Lebanon unfolded in the early Nineties, the game's working title, *Beirut Breakout*, betrayed the thoughts of Mike Posehn and his team, while its eventual release coincided with the first Gulf War in Iraq, a connection that no doubt helped sales. Taking its cue from *Desert*, sequel *Jungle Strike* presented the son of the previous game, Ibn Kilbaba, desperate to take revenge on the Yankees who defeated his father. He's in league with drug lord Carlos Ortega, a South American crime boss with more than a hint of Pablo Escobar about him, and there's a strong terrorism theme to *Jungle Strike* as Washington DC and the president himself are under threat from the two antagonists – including an escort mission to protect the prez as he retreats from the capital city.

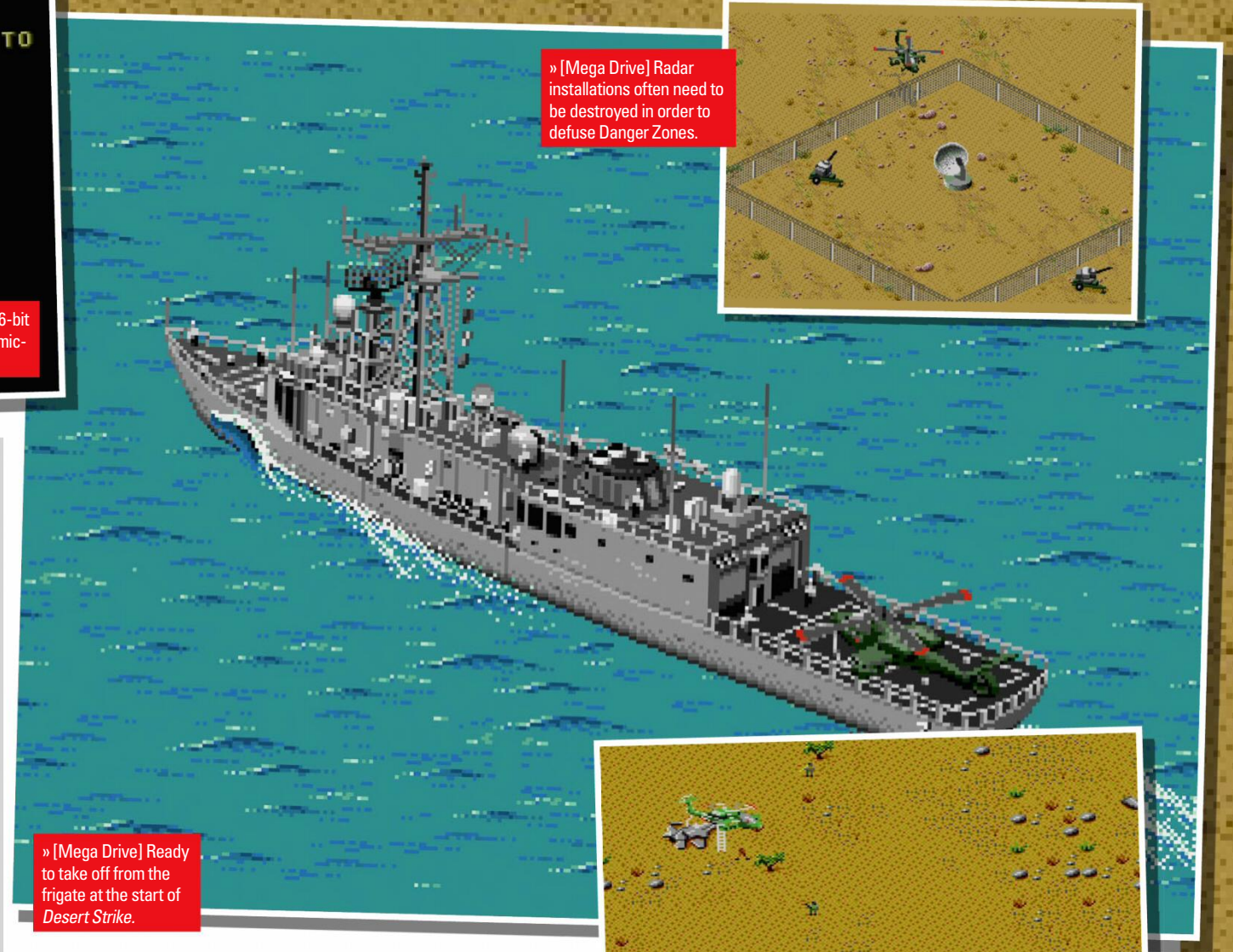
Four years later, *Soviet Strike* capitalised on the uncertain political situation surrounding the fall of the communist state, and even echoed *Jungle Strike*'s escort mission, only this time asking the Strike team to protect Boris Yeltsin as he seeks to escape the Kremlin. The Black and Caspian Seas also feature, before *Nuclear Strike* takes the action to the fictional land of Indocine. Communist tensions are high again as the action here moves on to rogue state North Korea and its southern counterpart.

Yet the most poignant and eyebrow-raising part of the entire *Strike* series remains the New York segment of third chapter, *Urban Strike*, a game released in 1994 yet set in the year 2001. When the right-wing extremist Malone uses a secret destructive laser weapon on the city, it's up to the Strike team to get in there and rescue the stranded civilians. The location? A stricken, fiery and horrifically mauled World Trade Center.



LISTEN UP, PILOTS
YOU ARE ABOUT TO BEGIN A CAMPAIGN TO SAVE THE WORLD FROM A PSYCHO MADMAN.
UNLESS YOU STOP THIS MADMAN HE WILL START WORLD WAR III, OR EVEN WORSE...

» [Mega Drive] The 16-bit games included a comic-book style briefing.



» [Mega Drive] Ready to take off from the frigate at the start of *Desert Strike*.

» [Mega Drive] Radar installations often need to be destroyed in order to defuse Danger Zones.

» [Master System] Rescuing Carlos Valdez in *Desert Strike*.

the lead SKU, Mike proposed the initial idea for what would become *Desert Strike*: an open, 3D world where the player flew a helicopter with an isometric point of view – third-person, but with first-person controls. "I hated third-person control!" exclaims Mike. "And the people at EA thought gamers would never be able to use first-person controls with a third-person POV." Fortunately, John agreed with Mike, and the pair insisted that the helicopter be controlled this way, and ultimately it was the right decision.

With Mike Posehn's company, Granite Bay Software, working closely with Electronic Arts, the development of *Desert Strike* began, although originally under a different name, as Mike explains. "During development, it was Beirut, Lebanon, that was making all the news in the Middle East, and the codename for the game was '*Beirut Breakout*'. Of course, we all knew a bit about Saddam Hussein, so Iraq was on our minds too, but the Gulf War was just a coincidence." Apart from its control method, the open world of *Desert Strike*, with each of its four levels fully explorable from the start, was something rarely seen on the 16-bit consoles. "I had never been a game-player," reveals Mike, "and therefore wasn't constrained by the linear nature of most gameplay; I just thought it was much more natural to be able to roam freely through a world." Mike's way of restricting players within the game world was by creating 'Danger Zones', areas of high alert which could only be safely approached once certain other criteria – such as destroying radar domes – had been completed. "It was all heresy at EA, and I fought many battles with the producers. But Stewart Bonn, my producer, stuck with me and we got it approved."

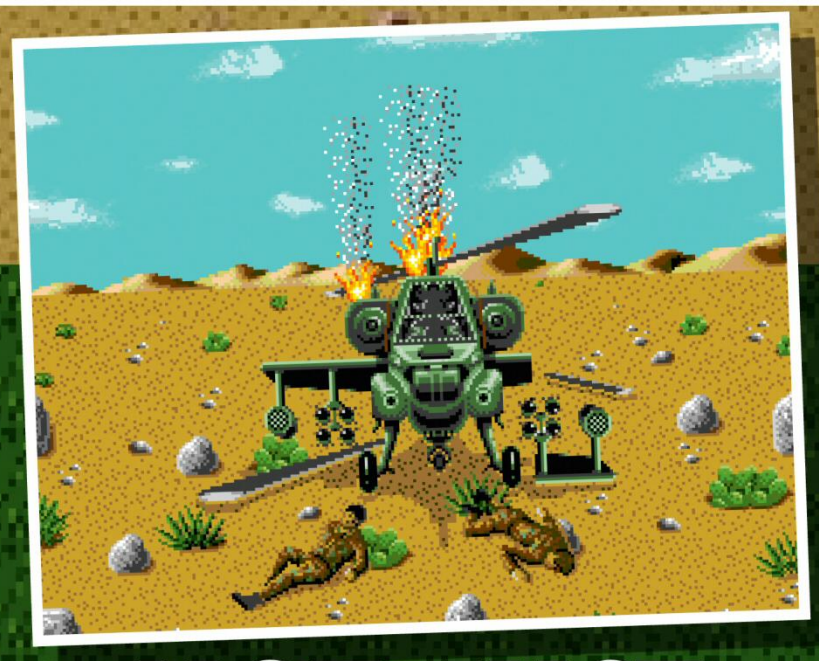
"Of course, we all knew a bit about Saddam Hussein, so Iraq was on our minds too, but the Gulf War was just a coincidence"
MIKE POSEHN

For *Desert Strike*'s Matchbox toy models, Mike called upon his best friend, and retired dentist, Tim Calvin. "I built a Revell plastic model Apache helicopter, and Tim made the 3D model," explains Mike. "They were highly detailed 3D models that we scrunched down to those small sprite images. I loved that little Apache – I still think it looks pretty cool today." Once designed, the hard work of getting the sprites working realistically within the world began. "Obstacle collisions were hard, as collisions with buildings in an isometric view is very tough to compute; getting the z-order right is very tricky." This z-order – the overlapping of two-dimensional objects in a 3D world – was made even more complex with the realistic physics that Mike wanted to include. "That's where my math background came in handy. The physics is based on second-order differential equations, and it was crucial to get it right in order to make the game believable." Anyone that has careered into a building with a cute crunching sound, sending their Apache into a rapid spin, will surely appreciate the effort that went into creating these little effects that elevated *Desert Strike* above its peers.

With Mike focusing on programming, it was assistant producer John Manley who concentrated on the level design. "He had a great imagination," continues Mike, "and came up with ideas for mini-missions, technical things I thought I could do which he would then stitch up into mission scenarios." Mike came up with the idea of SNAFUs – an acronym that you'll have to Google – where messing up would result in the authoritarian message 'Return To Base!'. "So rather than leading you through in a linear order, you wandered around the world and learned by SNAFU what things you had to do in order to advance," says Mike. Additionally, the game encouraged exploration with constant mini-battles taking place all over the map, along with downed fighter pilots and POWs to be rescued, each one successfully delivered home granting the player an armour bonus. It all took some squeezing into the Mega Drive's cart. "I think we had seven bytes of free memory on that first cart," notes Mike. "A lot of my time was spent creating custom compression algorithms for each type of game data. It was very painful."

But the effort was justified as *Desert Strike* became a massive success. "At the time, it was Electronic Arts' most successful non-sports franchise," remembers John Manley. "But even early in development, we considered that there might be a sequel. And as we were brainstorming a title for this new franchise, I remember suggesting *Desert Strike*, especially since that title would work well for sequels such as *Jungle Strike* and *Urban Strike*." And as it turned out, those would be the exact names for the next two episodes of this legendary series.

Released a mere year after the success of *Desert Strike*, *Jungle Strike* upped the ante considerably. Not only did the sequel feature ten levels (over the original's four), but now each level was significantly diverse, from the eponymous dense foliage to a familiar desert, a nefarious night mission and Washington DC. "We wanted to take what players liked about *Desert Strike* and give them a wider variety of locations, missions and vehicles," explains John, now lead designer and overall franchise director. With *Desert Strike* effectively taking place within one environment, *Jungle* presented multiple terrains and a variety of vehicles to control including a nifty motorcycle, triangular crimson hovercraft and a sleek, but fragile, ebony stealth bomber. "The way we created our levels was to print



NOT JUST HELICOPTERS

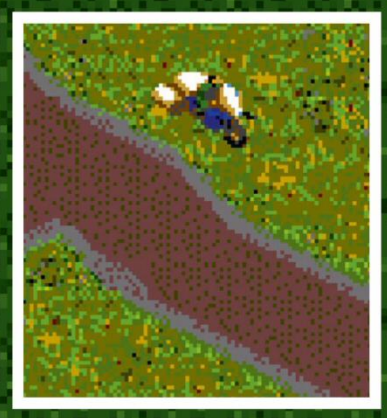
THERE ARE LOTS OF TOYS TO PLAY WITH IN THE STRIKE SERIES…

T-90 TANK

Operation five of *Nuclear Strike* contains a series of ornate and ancient palaces scattered around its map. Smash one of them and underneath sits a powerful T-90 tank. Pop to the nearby landing zone and this slow-moving, yet lethal vehicle is all yours.

NEWS CHOPPER

Nuclear Strike's News Chopper is a flighty and frail helicopter, with only light weaponry – although given its supposed status, any gun is a bonus. However, enemies will not fire upon this neutral vehicle – unless of course you fire on them!



MOTORCYCLE

Campaign five of *Jungle Strike* sees a series of armoured cars targeted by the Strike team. Unfortunately, they're impregnable from the air, so the player must ride this skittish motorbike in order to lay mines in the path of the tough trucks.

HOVERCRAFT

Able to nip under bridges and across land and water alike, this prototype hovercraft is a useful addition to the Strike arsenal. Powerful rockets and mines are a bonus; its clumsy way of gathering supplies is most definitely not. A fun deviation away from the chopper.

MOHICAN

The fictional Mohican is the default helicopter in *Urban Strike* and, as the name suggests, it's another narrow, yet powerful, chopper. Loaded up with 60 rockets, 1,000 chain gun rounds and nine missiles, the Mohican can also carry six passengers and a copilot.

STEALTH BOMBER

Fast, deadly and delicate, the stolen F-117 Stealth Bomber is acquired in *Jungle Strike*'s seventh mission. While its missiles and bombs carry a devastating payload that'll wipe out enemy units, towers and other tall obstacles are lethal to the aircraft, although at least you don't need to worry about picking up fuel.

COMANCHE

The Comanche is the main helicopter in *Jungle Strike*, and while its weapon systems remain similar to the Apache of the first game – machine gun, rockets and missiles – it's a much sleeker and swifter version, which is just as well considering the ramped-up difficulty of the sequel.

BLACKHAWKE

With some missions requiring multiple rescues, the Blackhawke is a useful inclusion. As more of a transport vehicle, there are no rockets on board, but plenty of machinegun ammo, more armour and a 20-person carry capacity. Hop on!

SUPER APACHE

The Apache is back, and even badder than before! Fully focused on stopping the war before it begins, *Soviet Strike*'s upgraded Super Apache can jink and pick up passengers as well as deal death with its loadout of missiles, hydras, bullets and wingtip sidewinder missiles. Prevent a war by blowing everything up? Sounds like our sort of caper.

ON FOOT

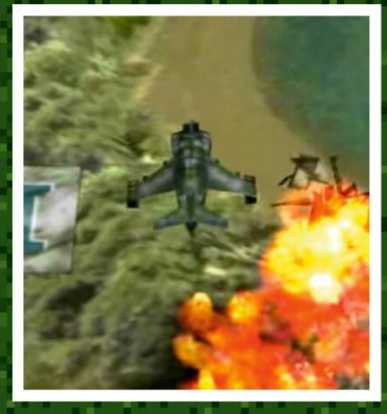
Urban Strike's on-foot sections didn't prove massively popular, and it's easy to understand why given the series' rich heritage of vehicular mayhem. Inside an oil rig, Alcatraz and a Las Vegas casino there's plenty of enemies to be shot and furniture to be destroyed up-close. It's just not as much fun as piloting a state-of-the-art helicopter, though.

APACHE

The original and many would say, still the best little Matchbox-esque armed-to-the-teeth chopper. Superbly modelled and animated, the relatively calm gameplay to *Desert Strike* enabled players to appreciate the elegant machine they were piloting. Room for six passengers, copious rockets, bullets and missiles, this khaki helicopter is where it all began.

GROUND ASSAULT VEHICLE (GAV)

Urban Strike's Ground Assault Vehicle is an absolute beast to drive around – but don't expect to get anywhere in a hurry. With 2,000 armour and a huge supply of deadly rockets, it can soak up and deal out copious amounts of damage. It's especially useful against fellow armoured cars, but, boy, it's *slooow*.



HARRIER

Sleek, highly manoeuvrable and armed to the teeth, this iconic aircraft is hidden away in *Nuclear Strike* and well worth the destruction you have to wreak in order to obtain it. Much like the real-life aircraft, it's unable to pick up any of your allies, but this jump jet more than makes up for this shortcoming with its terrifying firepower capabilities.

WHAT THE MECH?

WHAT HAPPENED TO THE PROPOSED SIXTH GAME, FUTURE STRIKE?

With the series taking an increasingly big turn away from realism, a *Strike* game set in the future, involving robotic enforcers that could transform into military vehicles, sounded incredibly cool. "It was actually going to be a *Shock Wave* game," recalls Michael Becker, "but the powers that be decided to slap it into the *Strike* franchise in time for us to do a cinematic at the end of *Nuclear Strike*." General Earle, perturbed at the events towards the conclusion of the fifth game, considers the use of a new prototype before declaring it not quite ready. But with the *Shock Wave* team engaged on *Future Strike* unwilling or unable to implement the flying element, Electronic Arts, worried the game was moving too far away from the ethos of *Strike*, removed the famous franchise moniker, and *Future Cop LAPD* was born.

» [Mega Drive] Rescuing UN inspectors in *Desert Strike*.

out large maps of the terrain for each level," explains John, "and then populate the world with individual pieces of paper that contained isometric images of buildings, roads, tanks, guard towers and so on. Then we would transcribe the X and Y coordinates for each object by hand into the level data." Much of the appeal of the original game had been the way the player could devise a plan of attack while juggling scoring and side-missions that distracted along the way. "We wanted to maintain that level of challenge, and also deliver as many objectives into the levels as possible," John continues. This tenet was fulfilled in maps that crammed the equivalent of ten square miles of targets and action within each 1.5 relative square mile of game world. "The idea was always to 'cut to the chase' and have something to do around every corner," says John.

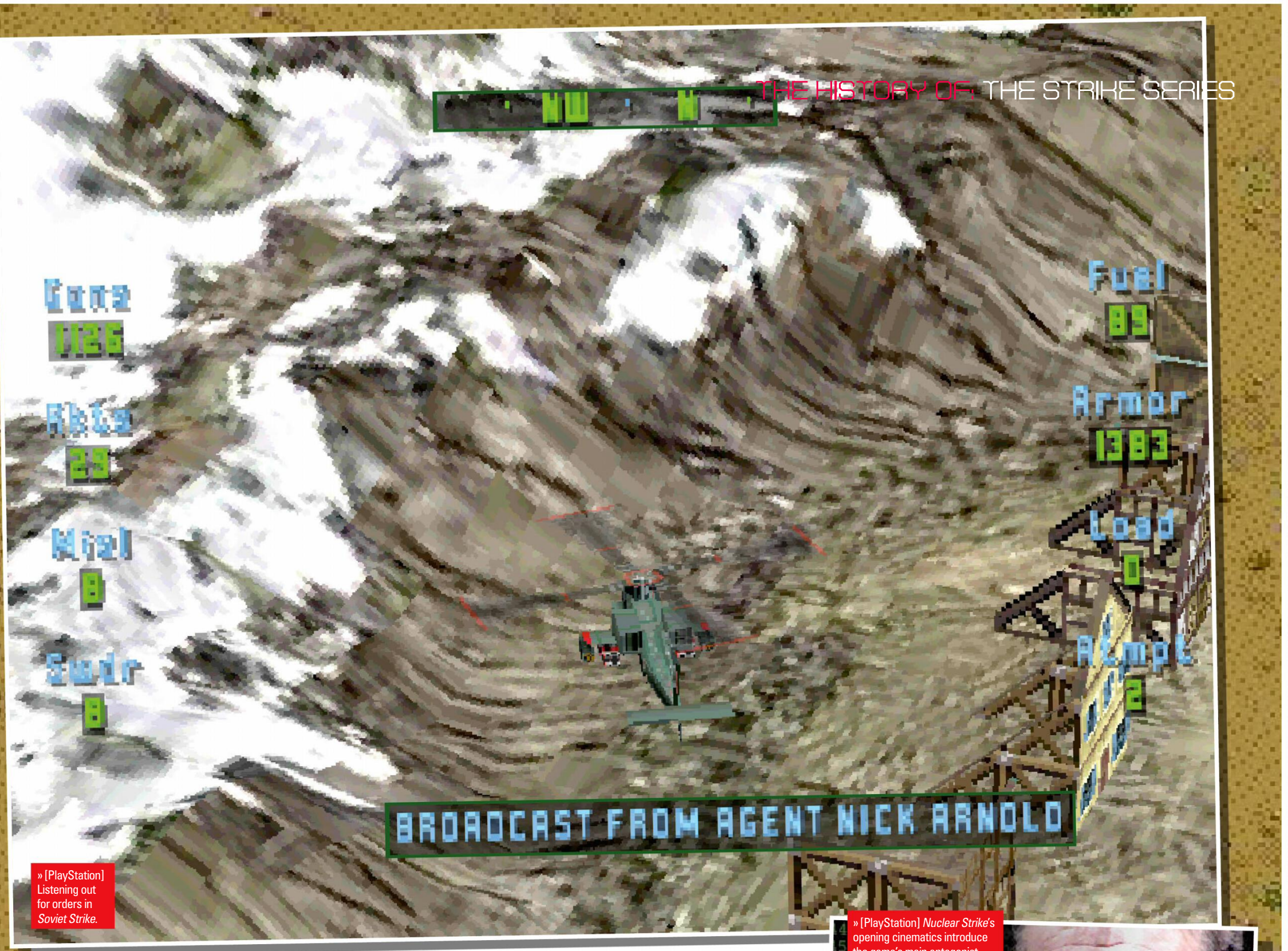
With Mike Posehn creating all of *Jungle*'s code and giving its designers the flexible tools that enabled them to craft the engaging scenarios, art director Julie Cressa, along with Michael Shirley and Tim Calvin, produced all the art and animation for *Jungle Strike* – a hugely increased workload over the original game. *Desert Strike* had been Electronic Arts' first eight-meg cart; with that game a hit, a 16-meg upgrade was approved by the publisher in order to deliver better graphics, sound effects and cinematics, the latter used to develop the story of Ibn Kilbaba, son of *Desert Strike*'s Middle Eastern antagonist, and Carlos Ortega, a notorious drug baron keen to end American interference in his illegal trade. Eager to portray the player as a member of a fictional special forces unit, the Apache was substituted for the then-unannounced Comanche chopper; yet that machine was just the tip of what the player could pilot in *Jungle Strike*. "There were so many other cool military vehicles in our fiction that we wanted to give players a chance to operate," continues John. "I think the motorcycle was the hardest to get right as it was initially too small to see on the road, and it required a control scheme that was different from anything else in the game." With the bike almost getting cut, John and the team toyed with letting the player drive a military truck laden with explosives – but in the end the tiny, yet powerful motorbike won out. Yet perhaps the most controversial addition for *Jungle* was the Stealth Bomber, the lethal, yet delicate aircraft that was totally distinct from all the other vehicles in the game in one vital aspect: it constantly moved. "I really liked flying the F-117 Stealth Bomber, the difficulty in precision targeting its missiles and the skill it took to line up the runway to land," John remembers. "When the game took control of the Stealth and went into its autolanding sequence, you knew you could exhale with relief."

Despite avoiding any real-life locations or names, accusations of jingoism surfaced for *Jungle*, as they had with *Desert Strike*, although in reality, the games were not treating their subject matter any differently to blockbuster movies such as *Clear And Present Danger* and *Die Hard 2*. "We had a unique attitude, with a nice mix of action and humour," notes John. "And you could argue that while *Jungle Strike* included realistic military themes, it was actually a send-up of other more serious war games. And since the Strike organisation stops wars before they happen, we always thought of ourselves as a peace game." With another mega-hit on its hands, Electronic Arts once more bankrolled another *Strike* game, this time featuring a new villain, new locations and a

» [Mega Drive] Taking fire in *Jungle Strike*'s chilly snow mission.

» [Mega Drive] Protecting Washington's famous monuments is the first task in *Jungle Strike*.

» [Game Boy] The success of *Desert Strike* saw it and its sequel *Jungle Strike* ported to an array of consoles.



» [PlayStation] Listening out for orders in *Soviet Strike*.

remarkably portentous scene in the city of New York.

Leading on Sega's Mega Drive once more, *Urban Strike* pushed the Strike organisation (now known as Strike CORE) fully to the fore as right-wing multimillionaire mogul HR Malone aims to tackle corruption in the USA by destabilising the incumbent government. Unable to stop the madman building a superweapon, Malone (now revealed to be Carlos Ortega from the previous game) is soon laying siege to New York City, devastating the Twin Towers in this fictional story, told seven years before the very real and tragic events of 11 September 2001. Following two more attacks, and tracking the villain to his base in Las Vegas, the Strike team finally takes him down and restores peace to the US. Featuring bigger map variety, more vehicles and divisive on-foot sections, *Urban Strike* was notably easier than the earlier games in the franchise, and signalled the end of the series on the Mega Drive. Despite further solid sales, the age of the 16-bit consoles was coming to an end; but no matter, for the mysterious Strike team was about to change course and fly into the world of 32-bit and FMV.

"You could argue that while Jungle Strike included realistic military themes, it was a send-up of other more serious war games"
JOHN MANLEY

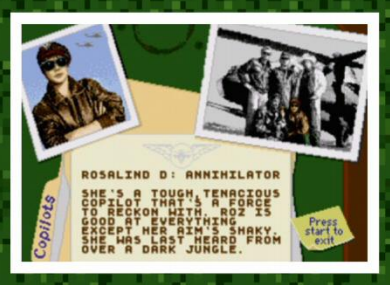
Released in 1996, *Soviet Strike* comprehensively transformed the technical format of the *Strike* series, while updating the gameplay and adding a considerable backstory. While involved nominally, Mike's role was as an advisor to the game's engineering team, commenting on technical design documents as he saw fit. The addition of full-motion video brought a new dimension to the series, along with a new group of artists, directors and programmers – including designer Michael Becker, an industry veteran who had joined Electronic Arts in 1992. "I played and immensely enjoyed the Sega *Strike* games,"

» [PlayStation] *Nuclear Strike*'s opening cinematics introduce the game's main antagonist.

» [PlayStation] The snowy wastes are a suitably Russian start to *Soviet Strike*.

THE BEST OF THE BEST

THE KEY COPILOTS OF STRIKE AND WHERE TO FIND THE MIA SOLDIERS


ROSALIND D: ANNIHILATOR
SHE'S A TOUGH, TENACIOUS COPILOT THAT'S A FORCE TO RECKON WITH. ROZ IS GOOD AT EVERYTHING EXCEPT HER AIM'S SHAKY. SHE WAS LAST HEARD FROM OVER A DARK JUNGLE.
Copilots
Press start to exit

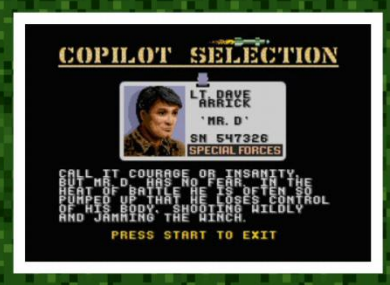
ROSALIND D: ANNIHILATOR

MIA at the beginning of *Jungle Strike*, the cool Rosalind D is a mean winch operator, and also packs a punch with the cannon. While her aim may be a little on the loose side, pick up Rosalind from mission four's POW camp, and you won't regret it.

M-I-A
J. H. FENNEL: WILD BILL
WILD BILL'S THE BEST OF BUNCH. JUST ASK HIM. HE'S THE TOP GUNNER AND HE USES THE WINCH LIKE A LASSO. HE LEARNED THE RULES SO HE COULD BREAK THEM.
Copilots
Press start to exit

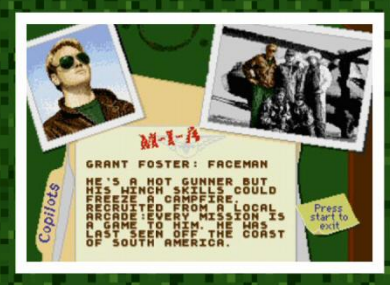
JW FENNEL: WILD BILL

The main man. Only he's gone and got himself shot down and is being held prisoner at Kilbaba and Ortega's snowy retreat. Before any other part of *Jungle Strike*'s mission six can be attempted, rescuing this ace gunner and winchman should be your aim.


COPILOT SELECTION
LT DAVE ARRICK
'MR. D'
SN 547326
SPECIAL FORCES
CALL IT COURAGE OR INSANITY, BUT MR D HAS NO FEAR. IN THE HEAT OF BATTLE HE GETS SO PUMPED UP THAT HE LOSES CONTROL OF HIS BODY. SHOOTING WILDLY AND JAMMING THE WINCH.
PRESS START TO EXIT

LT DAVE ARRICK: MR D

Mr D is a fearless copilot whose aim is as wonky as his sanity once things heat up. Available from the start of *Desert Strike*, his propensity to lose control makes wild shooting and winch jams a certainty at some point, usually just when you need him the most.


M-I-A
GRANT FOSTER: FACEMAN
HE'S A HOT GUNNER BUT HIS WINCH SKILLS COULD FREEZE A CAMPFIRE. RECRUITED FROM A LOCAL ARCADE EVERY MISSION IS A GAME TO HIM. HE WAS LAST SEEN OFF THE COAST OF SOUTH AMERICA.
Copilots
Press start to exit

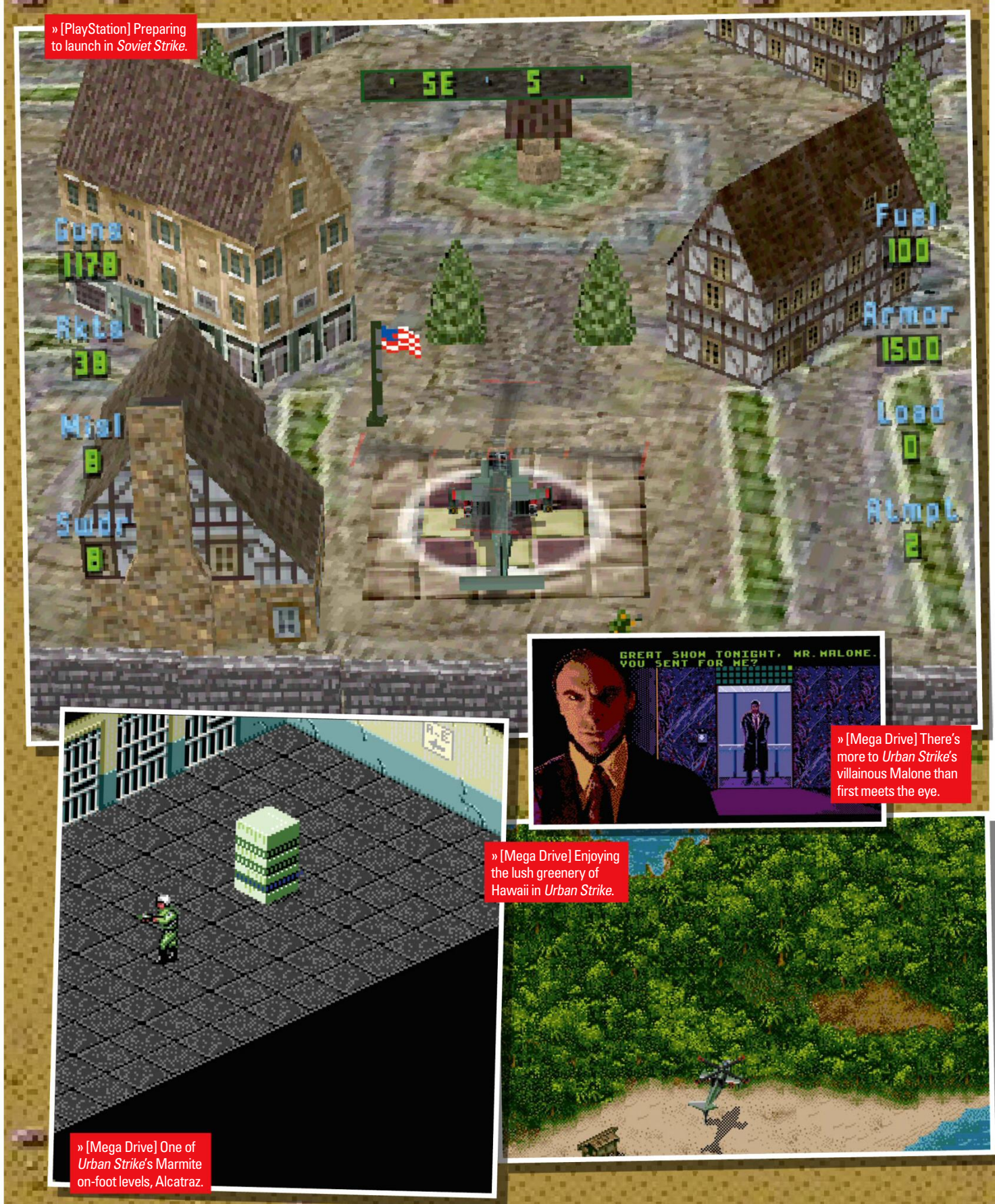
GRANT FOSTER: FACEMAN

Ace pilot Faceman (no relation to Iceman or Stringfellow Hawke) has been shot down and can be located – along with his F15 – in mission two of *Jungle Strike*. Make sure you back slowly towards him with the hovercraft, and this top gun is all yours.

SCOTT ANTONIO: EGO
EGO IS THE MOST FOCUSED COPILOT OF THE GROUP. HE DOESN'T HAVE A LIFE. DOESN'T WANT ONE. HE'S AVERAGE WITH THE GUN AND WINCH. ALWAYS READY. EGO NEVER SLEEPS.
Copilots
Press start to exit

SCOTT ANTONIO: EGO

Bearing more than a passing similarity to *Jungle Strike* game designer Tony Barnes, the aptly named Ego is the best pilot to select from the beginning of the game given he is more accurate with the gun than Mike 'Mr 3D' Sierra.



» [PlayStation] Preparing to launch in *Soviet Strike*.

» [Mega Drive] There's more to *Urban Strike*'s villainous Malone than first meets the eye.

» [Mega Drive] One of *Urban Strike*'s Marmite on-foot levels, Alcatraz.

» [Mega Drive] Enjoying the lush greenery of Hawaii in *Urban Strike*.

begins Michael, "And I remember John Manley showing me the maps for *Desert* that he thought were incredibly helpful, even though they were only taped-together printouts of level sections from Mike's authoring tool." Having had a hand in realising EA's dream of winning the 3DO market share, the failure of that console saw Michael transition over to the PlayStation along with most other development staff. "EA knew they should go after the Sony platform as soon as it came out, so we never started on a 3DO version [of *Soviet Strike*]," says Michael. "The tech was quite different – 3DO much less a true 3D platform – so a new engineering team was assembled for PlayStation *Soviet Strike*."

Michael credits EA's president of technology, Luc Barthelet with the idea of another helicopter-based game. "I think it was Luc who saw the opportunity to take the *Strike* trilogy over to CD platforms, and urged me to be the game designer." Having managed the art teams and overseen design on the 3DO game *Shock Wave*, both Michael and EA were in a good position to update the famous series to a new generation. The most obvious change was in the graphical display, with the move away from isometric third-person to a fixed view behind the player's vehicle. "Sega games used repeating tiles, and they had definite limits in terms of the photorealism they could provide," Michael explains. "In *Shock Wave*, I'd introduced the concept of large images of real digitised terrain, stitched together into a seamless and scrolling display out through the cockpit as you flew over it. For *Soviet Strike*, we wanted to expand on the stream knowledge we'd gained, and in this case it involved immense and constantly unique landscapes that our Photoshop artists created." The game's plot would also swap out the fictional realms of the earlier games and introduced – as its title suggests – a very real-world background to the wanton destruction. "That was a joint effort between myself and Flint [Dille, a script writer hired by EA]," remembers Michael. "We deliberately wanted it to be a 'shades of grey' force, doing good things while doing destructive things, and delivering plausible

JILL FISHBEIN: LEGAL
ORIGIN: ISRAEL
AIRCRAFT WEAPONS ARE HER LIFE. MAKES GOOD PILOTS LOOK GREAT & LEAVES BAD GUYS FULL OF HOLES.
M-I-A

JILL FISHBEIN: LEGAL

Born in Israel, Jill is the first MIA soldier you'll encounter in *Urban Strike* and is located on the Hawaiian southern beach in the first mission. Shoot the enemies that surround her and destroy her crashed copter to prevent it falling into enemy hands.

MARK DOUGLAS: LONG-HAUL
ORIGIN: UNITED STATES
WHEN THE GOING GETS TOUGH, THE SMART LOOK UP MARK. JACK OF ALL TRADES. HE'S GREAT.
M-I-A

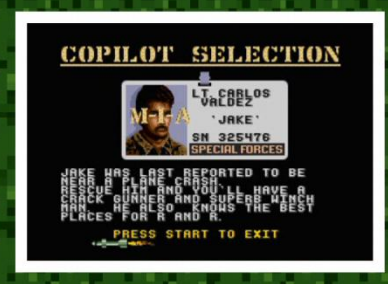
MARK DOUGLAS: LONG-HAUL

Inside Alcatraz sits Mark Douglas, otherwise known as Long-Haul, and he's had enough of twiddling his thumbs – they're getting itchy! The objective is to destroy the turrets outside his cell and spring possibly the best copilot in the whole series.

ATSUKO MATSUMOTO: STINGER
ORIGIN: JAPAN
AN EX-SMUGGLER WITH A 6TH SENSE. SHE CAN WINCH AND SHOOT BAD GUYS AT THE SAME TIME.
M-I-A

ATSUKO MATSUMOTO: STINGER

Hidden away on the largest oil rig of *Urban Strike's* second mission, Stinger is an awesome gunner, stringing together dozens of lightning-fast rounds at any enemy foolish enough to get in her way. It's well worth going out of your way to rescue.


COPILOT SELECTION
LT CARLOS VALDEZ
'JAKE'
SN 325476
SPECIAL FORCES
M-I-A
JAKE WAS LAST REPORTED TO BE NEAR A PLANE CRASH. RESCUE HIM AND YOU'LL HAVE A CRACK GUNNER AND SUPER WINCH MAN. HE ALSO KNOWS THE BEST PLACES FOR R AND R.
PRESS START TO EXIT

LT CARLOS VALDEZ: JAKE

Nestled in the northwest section of *Desert Strike's* first mission is a downed pilot, fighting for his life. A crack shot and crane specialist, Valdez is a demon when combined with the lightning winch. Don't forget to blow up his plane and protect those secrets!

COPILOT SELECTION
LT KEITH MICHAELS
'TRACKER'
SN 724564
SPECIAL FORCES
TRACKER IS A CONGRESSMAN'S SON, ASSIGNED ON A PEACETIME BASE WHERE HE LEARNED TO SHOOT AT A VERY YOUNG AGE. BUT HE'S A FELLOW OFFICER SOMETIMES TOO, AND HE REALLY CARES ABOUT THE GRUNTS.
PRESS START TO EXIT

LT KEITH MICHAELS: TRACKER

A congressman's son performing his service duty, Tracker is a good shot thanks to years of practice on the ranch, although not as good with the winch as you'd like. A good all-rounder and the best option from the start of *Desert Strike*.

deniability with fake news at the end of each level." With his experience developing FMV on the 3DO, Michael and his team transformed the comic book interstitials of the previous games into full-blown video. "Throughout the design phase, I worked closely with Flint on character design and biographies, plus all of the video and voice scripts, trying to add fun to what were often rather bland things in other games."

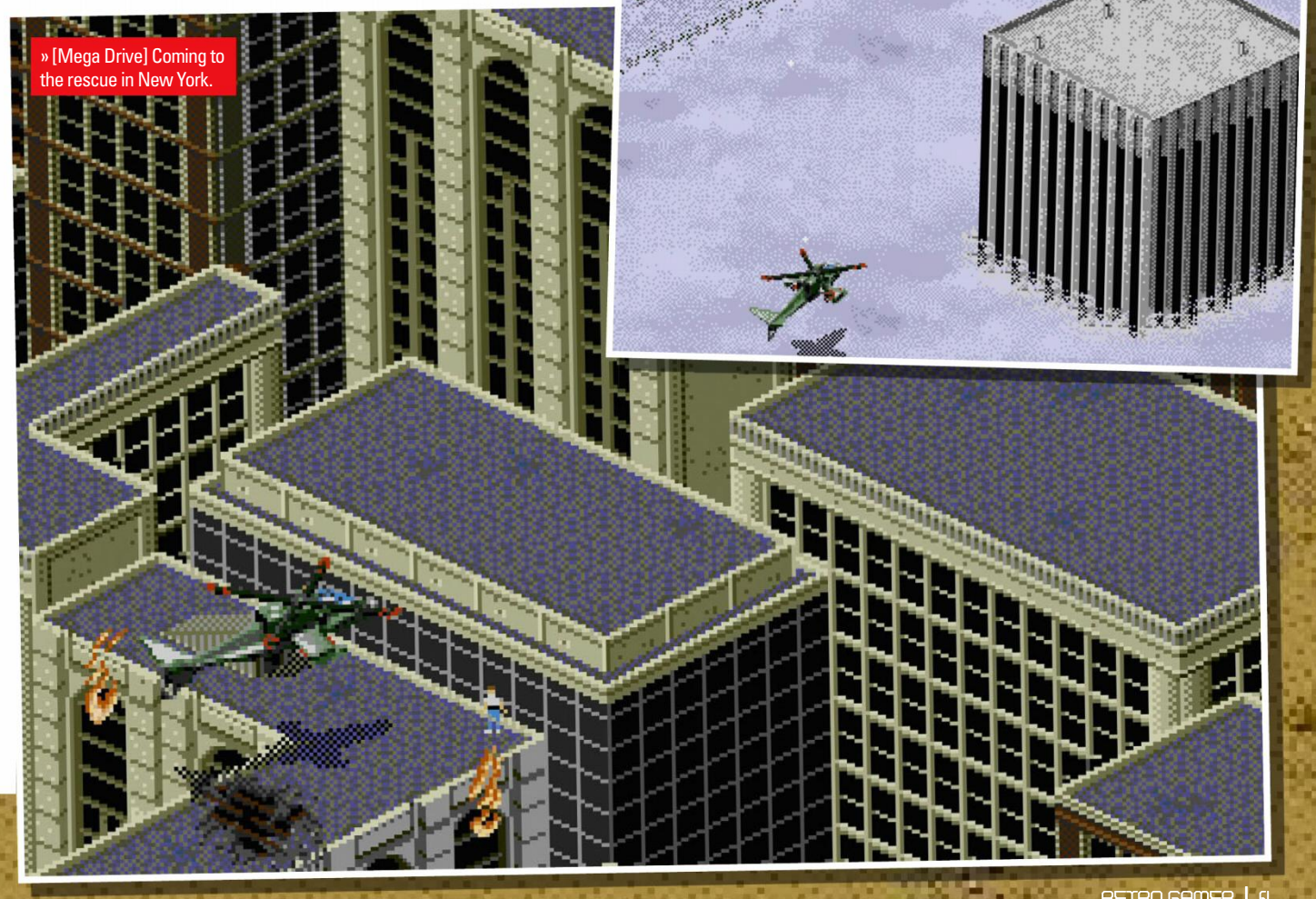
Other than the change of view, most of the other elements that had made the *Strike* games a hit were wisely retained – hoisting up armour, ammo and fuel, SNAFUs and the 'ripped from headlines' closeness to real world events. Plus, of course, the destructive element that rewarded the player for the more mayhem they created. "When it was released on the Nintendo 64, *Soviet Strike* won acclaim as the 'most violent videogame of all time'," laughs Michael. "I think it was because you could blow up literally *everything* in each level – most people found it fun." John Manley and Michael were already thinking of a further three-game series with *Asia Strike* and *America Strike* following on from *Soviet*. "But marketing nixed the name *Asia Strike* – fear in the China market – and EA were not keen on selling the idea of terrorism in the USA." These directives from the marketing suits would partially lead to the high-tech *Future Strike* – but there's one more game to cover before we get to the *Strike* series' final, abandoned episode.

> **"We deliberately wanted it to be a 'shades of grey' force, doing good things while doing destructive things"**
> MICHAEL BECKER

Electronic Arts was eager for another instalment and the involvement of Palomar Pictures in the FMV scripting of the next game, *Nuclear Strike*, distorted the real-world theme into something more esoteric. "Perhaps not surprisingly, the shades of grey and real world themes we'd introduced were changed into the black-and-white philosophy of Hollywood movies," notes Michael. Additionally, there was an element of 'too many cooks' as much of the design work was delegated to six separate level designers. In came a swathe of additional vehicles, some ill-advised real-time strategy elements and a fictional Asian country called Indocine. Called in to neutralise a spy-turned-warlord, the Strike team travel across each level, battling the forces of both the warlord and local gangs, inexorably destroying virtually everything both ground and sky-based. Retaining *Soviet*'s display, with a slightly modified engine, the fabricated backdrop failed to distract from *Nuclear Strike*'s continuing 'ripped from headlines' theme – here was a renegade nation with more than a hint of the Korean political tensions about it (even featuring North and South Korea), complete with a rogue ex-spy and a missing nuclear weapon.

With *Future Strike* coming and going as *Future Cop LAPD*, the *Strike* series slowed its rotors with *Nuclear*, and it seems appropriate to leave the final word to the man nicknamed 'The Godfather Of *Strike*', John Manley. "I am very proud of the *Strike* games today, especially with the 16-bit games and how we pushed the boundaries of what could be done with tile-based graphics in terms of gameplay and storytelling." Fond of all the games, when pushed, John cites the second game as the key entry in the series. "*Jungle Strike* proved that the *Strike* series was a true franchise, and practically its own genre, and that the success of *Desert Strike* could be repeated and expanded upon." And in these troubled times, who knows when the Strike team will be called on again, ready at a moment's notice to stop the latest madman hell-bent on world domination? ✱

» [Mega Drive] A fog-shrouded San Francisco from *Urban Strike*.


» [Mega Drive] Coming to the rescue in New York.

CLASSIC MOMENTS

Superfrog

» **PLATFORM:** AMIGA » **RELEASED:** 1993 » **DEVELOPER:** TEAM17

It's been a long summer, but thankfully you've got yourself a game that has kept you busy – a treat for doing well at school. It wasn't an easy choice, as you had to pass over *Body Blows*, *Lemmings 2* and *The Chaos Engine*, but you'd been hankering for a good platform game and all the magazines were saying *Superfrog* was the game for you. They were right. But now you're getting pretty good and you've started to suspect that you might have seen everything that it has to offer.

That's when *Superfrog* pulls out a brilliant surprise. On your way to the final stage, it's time for something completely different – a shoot-'em-up section. That's a nice change of pace after a bunch of platform stages, but even better than that is the fact that it's an homage to *Project-X*, one of your favourite Amiga games. And since *Superfrog* was made by exactly the same guys, it's no pale imitation. After finishing that, you gear up for the final stage, suitably refreshed by the diversion. ✱

BIO

After the success of *Mario* and *Sonic* on the consoles, Amiga fans began to want a classic mascot platform game to call their own. Many attempts came and went, but one of the most memorable was Superfrog. It should come as no surprise that this was a Team17 production, as the developer excelled at creating the kinds of arcade-influenced games that were more commonly associated with Japanese developers, and bringing them to the Amiga market. The game earned scores of 93% in *The One*, 88% in *Amiga Force* and 85% in *Amiga Format*, and an HD remake was released in 2013.

MORE CLASSIC SUPERFROG MOMENTS

Highly Animated

One of the brilliant things about Amiga games was that you'd often get cool intro sequences, and *Superfrog* offered a memorable one in which our hero became super with the power of Lucozade. You could gloat about that to your console-owning mates – well, unless they had a Mega-CD, but in that case they'd obviously suffered enough.

Deeper Underground

It's always fun when you run into a wall, only to see it dissolve almost instantly, revealing a new path with plenty more coins to pick up. But it can get even better – sometimes as you explore further into this new secret passage, more walls reveal themselves to be false, opening up an elaborate cave network that's positively stuffed with goodies.

Five A Day

They were talking about fruities and not fruits, right? Oh well. This gambling bonus game might not be considered so kid-friendly today, but it was a relatively rich offering with various features that offered some fun variety between stages. It actually added to the game's difficulty too, as you had to succeed at it to obtain level passwords.

Broom Broom

Superfrog isn't a game filled with bosses, so having one climactic encounter at the end of the game feels quite different, and that's what happens here as Superfrog takes on the witch. Of course, not being a hugely combat-oriented game it's not the most complex of encounters, but it does provide a fitting way to cap off the adventure.

PLEASE RELEASE ME

GREAT IMPORT GAMES BEGGING TO BE LOCALISED

Believe it or not, being a retro gamer has always been a rather expensive hobby, especially if you were into the exciting and eclectic world of collecting Japanese imports. There are thousands of great games that never made it out of Japan, many commanding high prices through specialist retailers or online auctions and many of those requiring that you learn the Japanese language to understand them. But the situation is slowly beginning to change.

Thanks to online services and countless compilations, previously import-only games are now being made available to Western gamers thanks to the relatively risk-free arena of digital distribution. Where once the likes of *Sin & Punishment* or *Cho Aniki* were once the preserve of wealthy importers, they're now easily accessible to all as they deserve to be.

With that in mind, here are our picks of the Japan-only games that we would like to see localised and re-released for modern, western gamers. But you needn't necessarily wait for some plucky local publisher to pick one of these games up; many of them are import-friendly already and some even have fan translations available. So if you have the disposable income and the tech to play them, then every one of these games is worth tracking down. If not, take to social media and start making your desire for a modern re-release known.

JOY MECH FIGHT

Format: Famicom **Publisher:** Nintendo
Developer: Nintendo **Year:** 1993
Fan translation available?: Yes

Think *Super Smash Bros* was Nintendo's first foray into the fighting game genre? Think again. *Joy Mech Fight* predates it by six years, and on the technically impoverished Famicom no less. The limbless fighters get around those technical constraints pretty well and lend *Joy Mech Fight* a distinct personality perfectly in keeping with Nintendo's upbeat stylings.

GANBARE GOEMON: UCHUU KAIZOKU AKOGINGU

Format: PlayStation **Publisher:** Konami
Developer: Konami **Year:** 1996
Fan translation available?: No

Amusing, clever and diverse, the *Mystical Ninja* series is one the market has sadly had to do without for years. The best games in the series still hold up today, though the oddball Japanese humour has meant many remain untranslated. Feudal Japan, giant robots, *Gradius* parodies… what's not to like?

HARMFUL PARK

Format: PlayStation **Publisher:** Sky Think Systems
Developer: Sky Think Systems **Year:** 1997
Fan translation available?: No

Import-only shooters are hardly a rarity, though with the prices this oddity commands (and the hassle of running a Japanese PlayStation game today), a re-release is about the only way most of us are likely to play it. Alternatively you can grab the PSN digital release from the Japanese store.

TOBAL 2

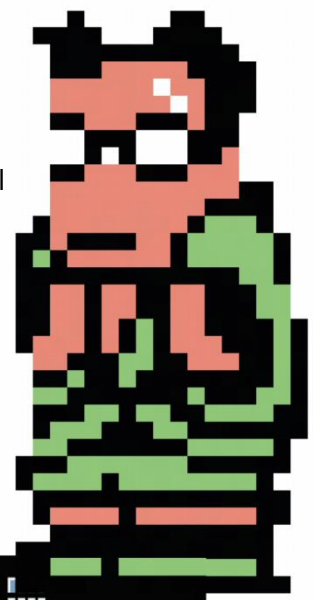
Format: PlayStation **Publisher:** Squaresoft
Developer: Dream Factory **Year:** 1997
Fan translation available?: In progress

While *Tobal No 1* demonstrated superb mechanics in the ring, its Japan-only sequel focused more on improving the RPG-style quest mode, developing it into a fully fledged third-person adventure in its own right. Translation might be a hard job but we'd still love for the world to see how much better this forgotten fighting franchise got before it passed away.

DOWNTOWN SPECIAL: KUNIO-KUN NO JIDAIGEKI DAYO ZENIN SHUUGOU!

Format: Famicom, Game Boy
Publisher: Technos
Developer: Technos **Year:** 1991
Fan translation available?: Yes

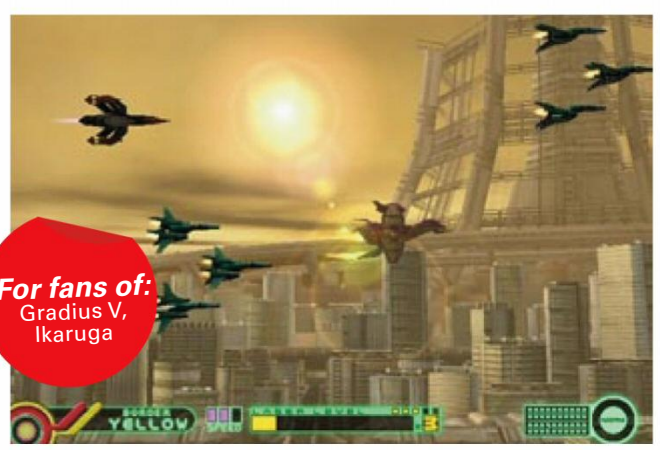
Cult NES brawler *River City Ransom* may be part of the *Kunio Kun* series, but it also has a sequel all its own too. That Japan-only follow-up took the kids of River City high school, cast them in a stage production set in Edo-era Japan and did what *RCR* did best: got them scrapping and throwing each other around. The setting was probably considered too obscure for gamers of 1991…



BORDER DOWN

Format: Dreamcast **Publisher:** G.rev
Developer: G.rev **Year:** 2003
Fan translation available?: No

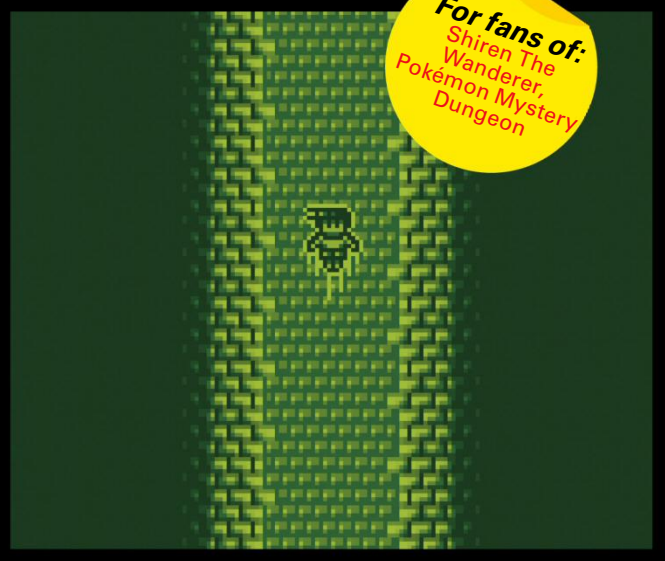
A side-scrolling shooter from the Dreamcast's twilight years (well, from beyond its grave, technically), *Border Down*'s unique conceit is that it punishes failure with increased difficulty. Rude. With Cave and Treasure titles everywhere on the download scene, it'd be great to see them joined by less obvious alternatives…



INTERNAL SECTION

Format: PlayStation **Publisher:** Squaresoft
Developer: Positron **Year:** 1999
Fan translation available?: No

The game that pipped *Rez* to the synaesthesia post, this silky-smooth tunnel shooter deserves greater recognition for its ingenious use of sound. Emulating the music CD support could be a problem, though – although the digital release of *Vib-Ribbon* proves that it is possible to achieve.



For fans of: Shiren The Wanderer, Pokémon Mystery Dungeon

CAVENOIRE

Format: Game Boy **Publisher:** Konami
Developer: Konami **Year:** 1991
Fan translation available?: Yes

One of the first Roguelikes to be made for a handheld, *Cavenoire* threw out the incomprehensible ASCII graphics associated with the genre's PC heritage, and added a more accessible structure that boiled the gameplay down to its essentials. Plus, Konami's musicians created some of the catchiest tunes heard on Game Boy. *Cavenoire* featured zero story and icon-based menus so, even if it's never re-released, the original is perfectly import-friendly.

For fans of: Legend Of Mana, Shenmue, Dragon Quest

EL DORADO GATE

Format: Dreamcast **Publisher:** Capcom
Developer: Capcom **Year:** 2000, 2001
Fan translation available?: No

Way ahead of its time, *El Dorado Gate* broke up a lengthy RPG into seven chapters, each released on a separate Dreamcast disc about one month apart from each other. The translation and publication complications involved prevented the beautifully drawn game from being released overseas, but the rise of digital distribution has since made such ideas commonplace.

70'S ROBOT ANIME GEPPY-X

Format: PlayStation **Publisher:** Aroma
Developer: Aroma **Year:** 1999
Fan translation available?: No

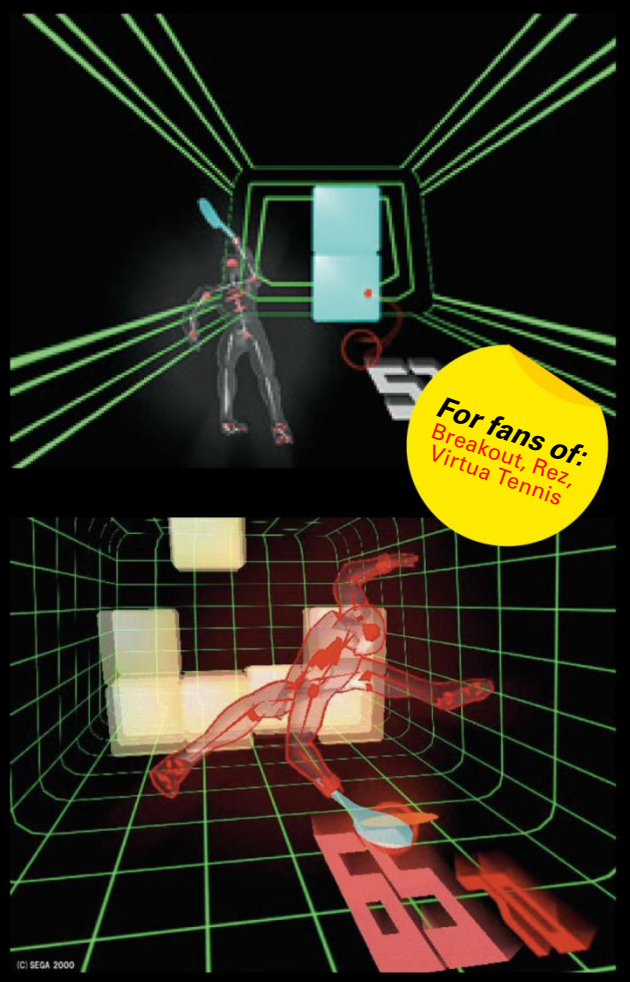
This inventive shooter comes on four discs, sending up the culture surrounding popular mech series like *Mobile Suit Gundam* and *Voltron* by punctuating the decent traditional bullet-dodging with clips of the fictional show and even adverts for toys that don't actually exist. Bizarre, yes, but hugely entertaining.

For fans of: Voltron, Mobile Suit Gundam: Gundam vs Gundam

COSMIC SMASH

Format: Dreamcast, arcade
Publisher: Sega **Developer:** Sega Rosso
Year: 2000 **Fan translation available?:** No

The concept is fairly unoriginal – the gameplay of *Breakout* expanded onto a 3D squash court – but it's the stylish execution that makes *Cosmic Smash* shine. *Rez*-style visuals, expressive character animation and classy presentation make the simple gameplay something to lose yourself in for hours. An online release is long overdue.



For fans of: Breakout, Rez, Virtua Tennis

For fans of: The Incredible Machine, Zack & Wiki: Quest For Barbaros' Treasure

ARTHUR TO ASTAROTH NO NAZO-MAKAI-MURA: INCREDIBLE TOONS

Format: PlayStation, Saturn **Publisher:** Capcom
Developer: Capcom **Year:** 1996
Fan translation available?: No

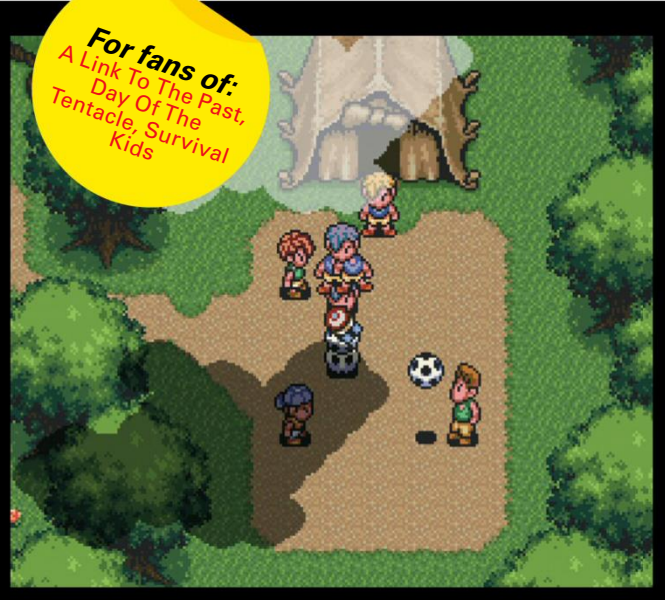
PC-loving retro gamers may have fond memories of *The Incredible Machine*, a Rube Goldberg-esque game in which Mouse Trap-style contraptions are built to create chain reaction solutions to puzzles. It was a great game, but boy did it look dull. Console gamers, your version of choice is this licenced edition of *The Incredible Machine*, featuring characters and themes from Capcom's *Ghouls 'N Ghosts* series. A modern remaster would be lovely, thanks.

For fans of: The Legend Of Zelda: Link's Awakening, Freshly-Picked Tingle's Rosy Rupeeland

FOR THE FROG THE BELL TOLLS

Format: Game Boy **Publisher:** Nintendo
Developer: Nintendo **Year:** 1992
Fan translation available?: Yes

Nintendo's forgotten Game Boy adventure supposedly served as the basis for *Link's Awakening*. The influence is plain to see, though there are a number of key differences that make *For The Frog The Bell Tolls* a great game in its own right. And thanks to a helpful (if somewhat dry) fan translation, it's finally playable for all. Well, all who can read either English or Japanese, anyway.



For fans of: A Link To The Past, Day Of The Tentacle, Survival Kids

MARVELOUS: ANOTHER TREASURE ISLAND

Format: Super Famicom **Publisher:** Nintendo
Developer: Nintendo **Year:** 1996
Fan translation available?: Yes

Like a cross between *Zelda* and *Maniac Mansion*, this obscure Nintendo RPG sees you control three boys and a monkey as they explore an island looking for treasure. *Marvelous* impressed Shigeru Miyamoto so much that he poached director Eiji Aonuma away to create *Ocarina Of Time*. Aonuma has been a big name for the *Zelda* series ever since.

LIVE A LIVE

Format: Super Famicom **Publisher:** Squaresoft
Developer: Squaresoft **Year:** 1994
Fan translation available?: Yes

Obscure JRPGs and hardcore shooters are hardly in short supply in this rundown, but there are just so many to recommend. *Live A Live* is one of the strangest (and shortest) RPGs on display, a string of seven unrelated chapters from different time periods (which can be played in any order) followed by an all-encompassing finale where it all comes together. Truly crazy stuff.

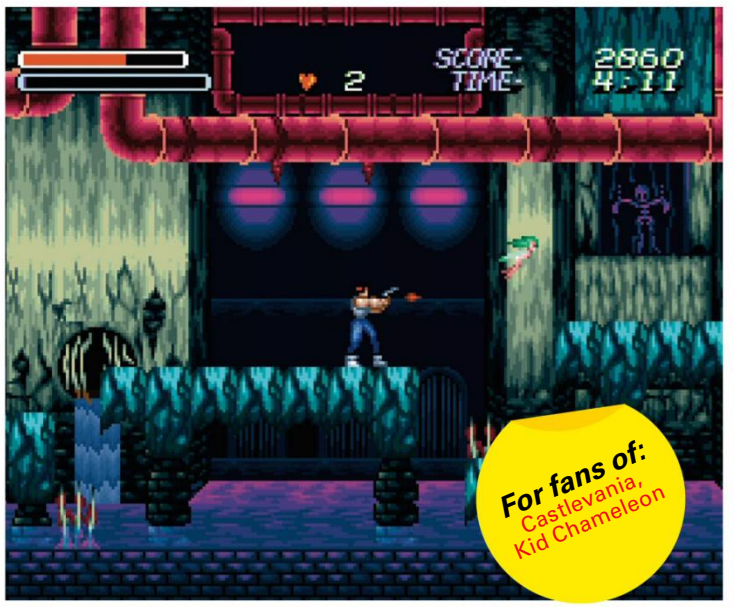
For fans of: The World Ends With You, Dragon Quest IV: Chapters Of The Chosen

For fans of: Samba De Amigo, Osu! Tatakae! Ouendan

MINIMONI SHAKATTO TAMBOURINE

Format: PlayStation, Arcade **Publisher:** Sega
Developer: Sega **Year:** 2002
Fan translation available?: No

Your eyes deceive you not – it's a Sega game for the PlayStation. This percussion-based successor to *Samba De Amigo* is set to the infectious music of J-pop sensations Minimoni. While a peripheral release for a downloadable retro game might be asking a little much, motion controls could easily do the job.

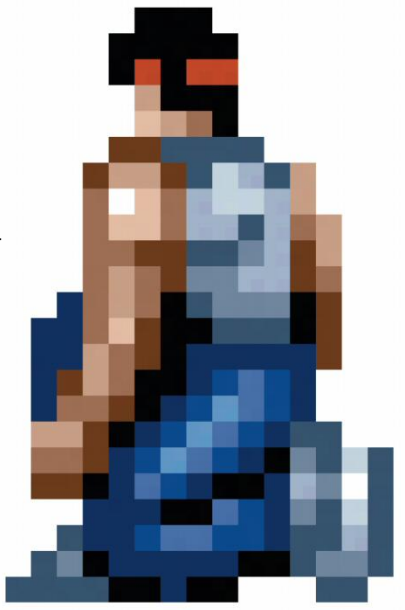


For fans of: Castlevania, Kid Chameleon

MAJYUUOU

Format: Super Famicom
Publisher: KSS **Developer:** KSS
Year: 1995
Fan translation available?: Yes

What starts as a basic side-scroller improves as tiny hero Abel transforms into different monsters, each with their own abilities. The journey through Hell is a punishing one (as if it could be anything else) but fans of early *Castlevania* games will likely dig the style and the game's difficulty level.



For fans of: Snatcher, Metal Gear Solid, Nine Hours, Nine Persons, Nine Doors

POLICENAUTS

Format: PC98, 3DO, PlayStation, Saturn
Publisher: Konami **Developer:** Konami **Year:** 1994
Fan translation available?: Yes

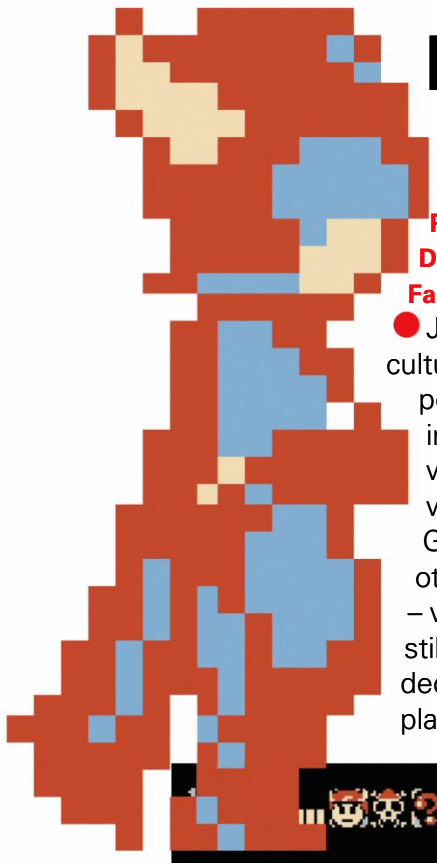
Hideo Kojima's spiritual sequel to *Snatcher* is generally considered to be the greatest visual novel ever written, an assertion recently leant credence by the excellent 2009 fan translation. So why not make that English language release official? Visual novels are getting more popular every year in the West, while Kojima is no stranger to late localisations, having released an official translation of *Metal Gear 2: Solid Snake* in 2006, 16 years after the original MSX release.

MOON: REMIX RPG ADVENTURE

Format: PlayStation **Publisher:** ASCII Entertainment
Developer: Lovedelic **Year:** 1997
Fan translation available?: In progress

Postmodern interpretations of the RPG are ten-a-penny nowadays, but *Moon* was one of the first, and remains one of the best. At the start of the game you're a kid playing a generic 16-bit *Dragon Quest* derivative until you're magically transported into the game world, which becomes more realistic from within and reveals that the population is sick of your selfish antics – looting their homes and killing the wildlife. And so begins your quest to make amends. Look for a Switch remake later this year.

For fans of: Dragon Quest, Contact, Little King's Story

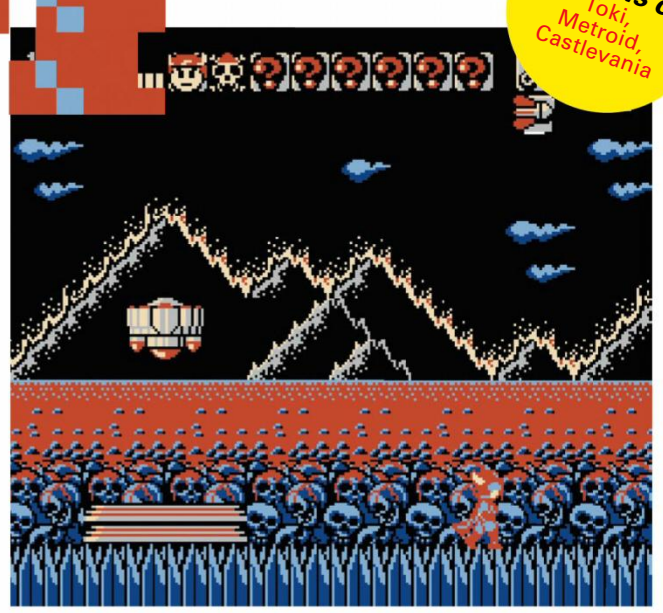


KONAMI WAI WAI WORLD

Format: Famicom **Publisher:** Konami
Developer: Konami **Year:** 1988
Fan translation available?: Yes

Japan's obsession with cultural crossovers has started to permeate the Western market in more recent years, but we're still not sure this one – with King Kong, Konami Man, Goemon, Simon Belmont and other more obscure characters – would make sense to us. It still stands up as a decent game to play, though.

For fans of: Toki, Metroid, Castlevania



LADY STALKER

Format: Super Famicom **Publisher:** Taito
Developer: Climax Entertainment **Year:** 1995
Fan translation available?: In progress

Extremely popular Mega Drive RPG/platformer *Landstalker* has an unusual set of spiritual sequels and spin-offs in the likes of *Dark Saviour* or *Timestalkers*, all of which made it out of Japan, except for what is perhaps the best entry. *Lady Stalker* removed the platforming, put you in control of a female protagonist and introduced random battles. Its Japan-only status is our loss, though an English language release would probably need a less dubious title.

For fans of: Landstalker, Alundra, Steal Princess

For fans of: Paradroid, Space Station Silicon Valley

LOL: LACK OF LOVE

Format: Dreamcast **Publisher:** ASCII Entertainment **Developer:** Lovedelic **Year:** 2000
Fan translation available?: No

This innovative adventure game sees you emerge from the primordial soup and gradually evolve into better creatures, as you help out other lifeforms in a miniature quest to save a planet from intergalactic bulldozers. The non-verbal communication of the gameplay makes *LOL* totally import-friendly, but the game's rarity makes it the perfect candidate for a re-release.

SHINING FORCE: FINAL CONFLICT

For fans of: Shining Force, Shining Force II

Format: Game Gear **Publisher:** Sega
Developer: Camelot Software Planning
Year: 1995 **Fan translation available?:** Yes

There are three *Shining Force* games on the Game Gear, and while the first two made the journey to the west (either on the Game Gear or as part of *Shining Force CD*) the third, and best, remained Japan-only. Which is a shame because *Final Conflict* actually bridged the story between the previously unrelated Mega Drive *Shining Force* games, uniting many of their major characters into one great strategy-RPG quest.

MAGICAL HAT FLYING TURBO ADVENTURE

Format: Mega Drive **Publisher:** Sega
Developer: Vic Tokai **Year:** 1990
Fan translation available?: No

A colourful and altogether bonkers alternative to *Decap Attack* (the Western version of effectively the same game, albeit with different characters and stage design), *Magical Hat*'s anime basis meant licensing problems prevented an overseas release. And will probably continue to do so. But hey, we can dream.

For fans of: Decap Attack, Psycho Fox, Dynamite Headdy

LSD: DREAM EMULATOR

Format: PlayStation **Publisher:** Asmik Ace
Developer: OutSide Directors Company **Year:** 1998
Fan translation available?: No

Trippy dreamscapes and objective-free gameplay really set *LSD* apart from anything else from the late Nineties. And while its visuals have aged pretty poorly, the game is so weird you really have to experience it. Sadly the closest *LSD* has ever come to any sort of western release is when a screenshot from the game was used for the cover of alt-J's *Relaxer* album.

For fans of: Noby Noby Boy, Switch Panic, Linger In Shadows

SEGATA SANSHIRO SHINKENYUGI

Format: Saturn **Publisher:** Sega
Developer: Sega **Year:** 1998
Fan translation available?: No

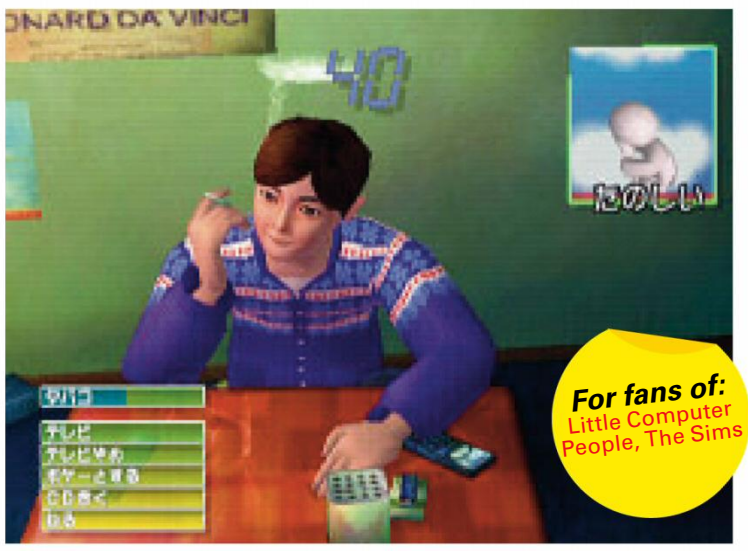
Segata Sanshiro, for those unaware, was a sort of Sega mascot during the late Nineties, who would appear in Japanese TV ads and scream "You must play Sega Saturn!" at the viewer. Not enough people followed his advice, but the larger than life character did gain enough of a cult following to star in his own minigame collection. *Segata Sanshiro Shinkenyugi* is yet more of the madness that only Sega seemed capable of.

For fans of: Bishi Bashi Special, Sega Saturn

ROOMMANIA #203

Format: Dreamcast, PlayStation 2 **Publisher:** Sega
Developer: Sega **Year:** 2000
Fan translation available?: No

Quirky, indescribable games like this are the reason the Dreamcast was both a commercial failure and a critical success. Imagine Sega's own *Seaman* but instead of interacting with a sea man you just play with a, er, man. The whole game takes place in one room, and it's your job to complete missions by fiddling around with that room to indirectly control the protagonist's life. It's slightly weird but the emergent, experimental gameplay is self-destruct-era Sega at its finest.



For fans of: Little Computer People, The Sims

SUZUKI BAKUHATSU

Format: PlayStation **Publisher:** Enix
Developer: Enix **Year:** 2000
Fan translation available?: No

Or 'That Bomb Game', for people that can't remember Japanese titles. A string of increasingly strange bomb defusal challenges (including a suspicious orange and the moon), *Suzuki Bakuhatsu* combines a simple tool set with brain-bending sets of cogs, wires and screws, with a ticking clock casting a terrifying shadow over even the simplest of tasks.

For fans of: Trauma Centre: Under The Knife, Smart Bomb, Professor Layton

TACTICS FORMULA

Format: Saturn **Publisher:** Sega **Developer:** Aki Corp **Year:** 1997 **Fan translation available?:** No

Billed as a board game on the back of the box, *Tactics Formula* is actually more of a… actually, we have no idea what to call it. It's definitely not a board game, though. It's a sort of Formula 1 strategy game where you program in paths and AI routines for your vehicle in advance of a race and then see what happens once the racers set off without your direct control. It's sort of like *Football Manager* crossed with a horse racing simulator, then. Or something. If only it was in English so we could tell…

For fans of: Football Manager, Derby Owners Club

SHINING FORCE III

Format: Saturn **Publisher:** Sega
Developer: Camelot **Year:** 1998
Fan translation available?: Yes

You may well believe that *Shining Force III* was released in English but, well, it wasn't. Only the first part of three chapters ever made it over here, and ended on a cliffhanger that left fans utterly bewildered. Not only did the other two chapters conclude the story, they also offered a chance to play out the events of the first part from the perspective of the opposing force. The narrative twist injected a rare poignancy into the genre that deserves to be translated over two decades on.

For fans of: Shining The Holy Ark, Final Fantasy Tactics

ROYAL STONE

Format: Game Gear **Publisher:** Sega
Developer: Sega **Year:** 1995
Fan translation available?: Yes

If, like us, you didn't even know that there *was* a sequel to *Crystal Warriors*... well, consider yourself now informed. Another surprisingly mature title for the platform (in that if features hardcore elements like permadeath and elemental type match-ups) and another great strategy game on Game Gear. Who would have thought it?

For fans of: Shining Force, Fire Emblem

For fans of: Street Fighter EX, Jet Set Radio

SLAP HAPPY RHYTHM BUSTERS

Format: PlayStation **Publisher:** ASK **Developer:** Polygon Magic **Year:** 2000
Fan translation available?: No

Thought *Jet Set Radio* was the first cel-shaded game? Turns out that race was actually a tie – Polygon Magic's odd fighter was released on the same day. Fusing those two famously compatible genres of fighting and rhythm-action, launching into extensive *DDR*-style sequences on landing a super is a clear and unique highlight.

PANZER BANDIT

Format: PlayStation **Publisher:** Banpresto
Developer: Fill-In Cafe **Year:** 1997
Fan translation available?: No

Hailed by many as the best scrolling fighter on PlayStation (hardly surprising with company like *Fighting Force* and *Time Commando*), *Panzer Bandit* is the spitting image of Treasure's *Guardian Heroes,* albeit without the RPG aspects. A forgotten highlight in an almost forgotten genre, so maybe it's time to remember.

For fans of: Guardian Heroes, Code Of Princess EX

For fans of: Final Fantasy VI, Samurai Shodown

SAMURAI SHODOWN RPG

Format: Neo Geo CD, PlayStation, Saturn
Publisher: SNK **Developer:** SNK **Year:** 1997
Fan translation available?: In Progress

Haohmaru and friends trade 2D battles for turn-based RPG combat in an expectedly impenetrable wall-of-text adventure. Character selection and the integration of traditional special move commands both work well, though translation would be a monumental task – the ongoing fan project seems to have stalled too, sadly.

For fans of: Rakuga Kids, Power Stone, Sonic Battle

RAKUGAKI SHOWTIME

Format: PlayStation **Publisher:** Enix
Developer: Treasure **Year:** 1999
Fan translation available?: No

Like so many artistically ambitious retro games, Treasure's odd arena-based brawler looks pretty sketchy today. No pun intended. Still, when the asking price for a physical copy is in triple figures, it'd be silly not to dream of a digital alternative for this little history lesson – it's up on the Japanese PS Store too, which makes matters a little simpler.

For fans of: The Legend Of Zelda, Kid Icarus

NAZO NO MURASAME-JO

Format: Famicom Disk System, GBA
Publisher: Nintendo **Developer:** Nintendo
Year: 1986 **Fan translation available?:** Yes

This *Zelda* and *Metroid* stablemate has never had a sequel but its cult status has gained it references in a number of modern games including *Super Smash Bros.*, *Captain Rainbow*, *Pikmin 2*, *WarioWare DIY* and *Samurai Warriors 3* – leading many Western gamers to wonder what it's like. And… it's actually very cool. What looks like a *Zelda* clone on the surface is actually a top-down arcade game with intense onslaughts from all sides and a *Shinobi*-like combination of sword and shuriken attacks. A typically Nintendo host of secrets to discover make this one of the developer's great forgotten classics.

For fans of: Sega

SEGAGAGA

Format: Dreamcast **Publisher:** Sega
Developer: Sega **Year:** 2001
Fan translation available?: No

By 2001, Sega's fortunes were at an all-time low and, while the company's directors sought to reverse those fortunes by ushering in a new age of third-party production, its typically zany game designers briefly forged on with their nuts ideas. And in *Segagaga* they asked one simple question to the fans: 'What would you do differently?' In this game you got to run a failing Sega for yourself, but *Segagaga* was no stuffy business sim; it was a self parody that juxtaposed frustrated Sega staff with depressed has-been mascots, culminating in an epic battle against Sega hardware past. The game remains a work of crazy reflexive genius, and demands to be played by anyone with even a passing interest in games industry history.

TETRIS BATTLE GAIDEN

Format: Super Famicom **Publisher:** Bullet Proof Software **Developer:** In-house **Year:** 1993
Fan translation available?: No

Considering its simplicity, the years have proven that it's still remarkably easy to get *Tetris* wrong. This competitive variant does no such thing, however, combining some clever ideas like a shared tetromino pool and attack/defence mechanics to great effect.

SWEET HOME

Format: Famicom **Publisher:** Capcom
Developer: Capcom **Year:** 1989
Fan translation available?: Yes

Best known as the game that inspired Shinji Mikami to create *Resident Evil*, *Sweet Home* is a survival-horror game in miniature, with cute Famicom visuals that still somehow manage to be scary. The gameplay is very different to *Resident Evil* though, featuring an even greater emphasis on adventure game mechanics. Anyone who's already played the fan translation will know that the lack of an official English language release is one of the great oversights of the 8-bit era.

X

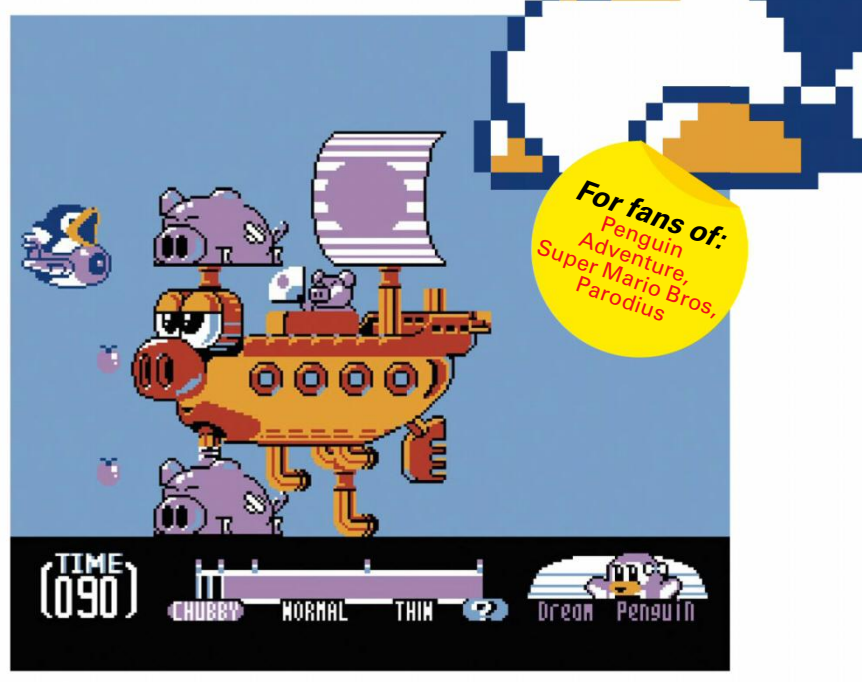
Format: Game Boy **Publisher:** Nintendo
Developer: Argonaut Software **Year:** 1992
Fan translation available?: No

Despite being programmed by a pair of British designers, this technically impressive Game Boy game was only ever released in Japan. The way Dylan Cuthbert and Giles Goddard managed to squeeze a full 3D engine out of the humble Game Boy impressed Nintendo so much that they hired Argonaut to produce the SNES Super FX chip and asked Cuthbert and Goddard to develop *Star Fox*. An unofficial sequel, called *3D Space Tank*, was released by Cuthbert's Q-Games in 2010 on DSiWare.

UFO: A DAY IN THE LIFE

Format: PlayStation **Publisher:** ASCII Entertainment
Developer: Lovedelic **Year:** 1999
Fan translation available?: No

This quirky adventure game sees the player, as a cute little alien, charged with locating 50 other missing aliens within a single apartment complex. The catch? They're invisible. To find the aliens you have to carefully examine the details of the building, looking for changes in the surroundings or unusual behavior in the residents – such as an alarmed cat screeching as its smells an alien – and then take a number of photos where the aliens may be. Like Lovedelic's own *LOL*, *UFO* is another dialogue-light, import-friendly adventure and would therefore be easy to localise for modern audiences.



YU YU HAKUSHO: MAKYO TOITSUSEN

Format: Mega Drive **Publisher:** Sega **Developer:** Treasure
Year: 1994 **Fan translation available?:** Yes

This Treasure release took all of the technical innovation the developer was known for and channeled it into the popular *Yu Yu Hakusho* anime licence, creating a fast and dynamic fighting game style that perfectly recreated the blistering pace and OTT action of the cartoon. Sadly, licensing issues prevented it from seeing an international release and we're unlikely to see it return.

YUME PENGUIN MONOGATARI

Format: Famicom **Publisher:** Konami **Developer:** Konami **Year:** 1991 **Fan translation available?:** Yes

Despite rescuing the princess, and love of his life, in previous game *Penguin Adventure*, Konami mascot Penta fell upon hard times in his next game. In *Yume Penguin Monogatari* he finds himself overweight and single as the princess dumps him for a rich, top hat-wearing rival. To get her back he has to run off the excess weight, while his rival dispatches enemies to literally throw food straight into his mouth, making life pretty difficult for the poor penguin.

Tenchi Muyo: Rensa Hitsuyou

MUYO BIEN

» SATURN » 1997 » ACCESS

My fondness for puzzle games is no secret, but one of the things I particularly love is finding weird spin-off puzzle games. Did you know that there have been two officially licensed *Columns* games featuring the *Sakura Wars* cast, and another with Osamu Tezuka characters like Astro Boy? How about the versions of *Puzzle Bobble* that feature *Psychic Force* and *Azumanga Daioh* themes? These are all real things, and my latest target is this original concept.

Tenchi Muyo is an oddball comedic space opera series, which was pretty popular with western anime fans back in the late Nineties and early Noughties, as it was aired on Cartoon Network. Weirdly, the fanbase seems to have disappeared, and there seems to be relatively little nostalgia for the show today given its past popularity – it's telling that when we searched Twitter, the first result we found was someone asking, "Why does no one give *Tenchi Muyo* the credit it deserves?"

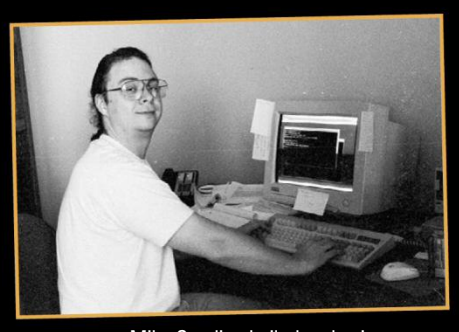
The game that goes with it is pretty good, too! You drop balls into what is essentially a hex grid, and when three of the same colour connect, they're cleared from the playfield. If you set off a chain reaction, you'll attack your opponent. What sets the game apart is that your attack floods the other player's side of the screen with water – nothing below the water line can be cleared, and your pieces react to the water in different ways. Most of them are ordinary and will float on the surface, but anchors will plunge below. The important ones are the hearts – clearing them will reduce your water level and potentially release new combos in the process, making them excellent for initiating counterattacks. You lose if you reach the top of the screen either naturally or by being flooded out.

It's a really interesting game and I'm hoping to get the chance to find out how it plays against a real player. The only problem will be finding someone willing to test that with me – I'm pretty sure I must have put everyone in the office off puzzle games by now. [Too right - Ed]

THE MAKING OF FULL TILT! PINBALL

Cinematronics was founded on the prophecy that high-speed gaming was going to move to Windows. After two disastrous projects, the team finally struck gold with Full Tilt! Pinball, which would go on to become one of the most distributed games of all time

WORDS BY HARETH AL BUSTANI



» Mike Sandige built the physics engine to be 'agnostic' of the tables, allowing designers to tweak components to suit their vision.

» Here's a more recent picture of Mike Sandige. You can still see he enjoys a game of pinball as this in-progress game of Space Cadet proves.

In 1994, having licensed his Quantum compressor to Microsoft, developer David Stafford decided to use the funds to start a videogame company, Cinematronics, with his friends Mike Sandige and Kevin Gliner. "The whole premise of the company was that gaming was going to shift to Windows. As a developer, I knew Windows and its internals very well, and my partner Mike was a very experienced game developer."

Setting up increasingly demanding games for DOS, David says, was becoming a challenge for average users, requiring them to make boot disks – and return rates were reaching 50%. Windows, he believed, was going to make DOS's driver and memory issues disappear. Sooner or later, all developers would be forced to embrace the shift – and he wanted to lead the charge. "Mike was a great engineer," David recalls. "Kevin was a game designer, and he handled sales, and I filled in all the other pieces." Kevin would go on to prove his sales chops by securing a remarkable $200,000 publishing deal for a puzzle game demo Mike had developed – four times more than David thought possible. ▶

TABLE BREAKDOWNS

ASTRONAUTS AND PIRATES AND DRAGONS, OH MY!

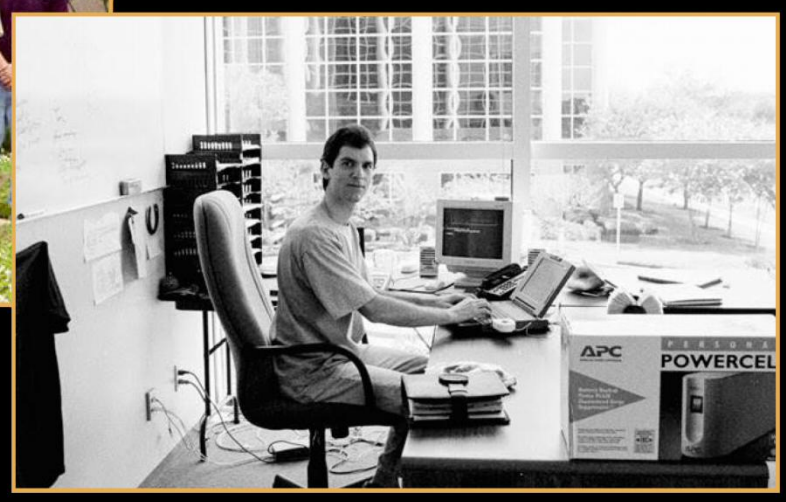
SPACE CADET

This offering, developed first for *3D Pinball* for Windows, is the most well-rounded of the three tables. Players take on various space missions to level up the ranks, while ensuring the fuel lights on the launch ramp stay on. After *3D Pinball* shipped, designer Kevin Gliner spoke to a pinball machine designer from the Seventies, who recommended he adjust the flipper angle and the toggling rollover lights for *Full Tilt! Pinball*.

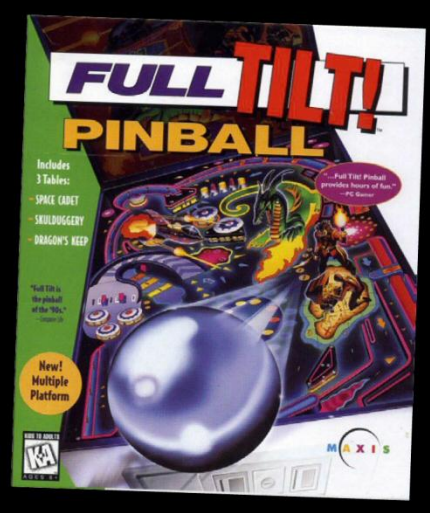
» Despite a very rocky start, Cinematronics, pictured in 1997, quickly blossomed into a profitable company, one that Maxis purchased for its Windows expertise.

DRAGON'S KEEP

Dragon's Keep tasks players with completing a series of quests: stealing a treasure hoard, rescuing a maiden, battling a fire lizard and more, before finally working towards slaying the dragon. Upgrades give players access to spells, armour and other level-ups, which activate magnets, chutes and gates across the board, to mix up gameplay. Meanwhile, the table includes an array of elevated ramps and a collapsing drawbridge.



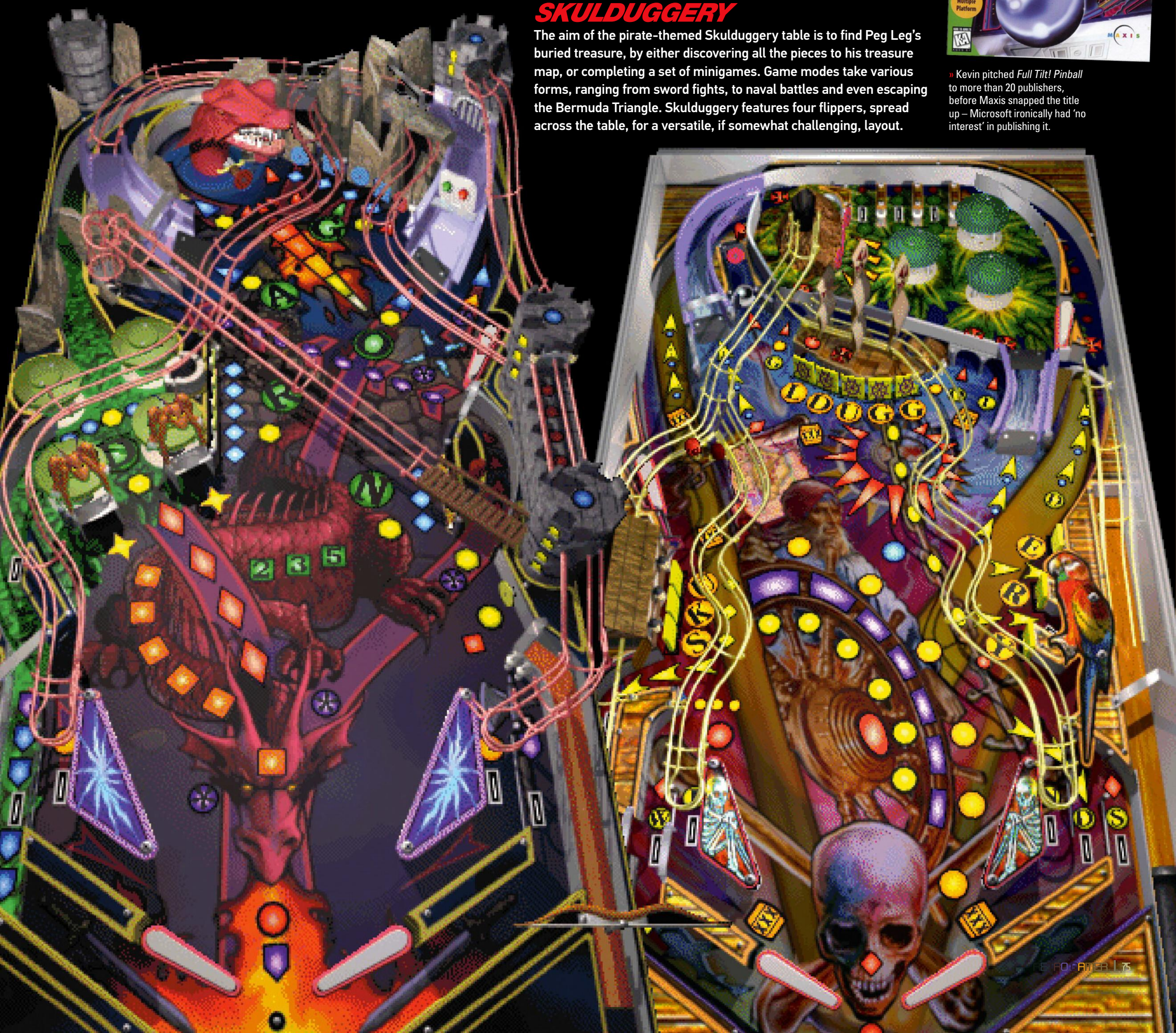
» As well as designing *3D Pinball* and *Full Tilt!*, Kevin Gliner was remarkable at sales, securing $200,000 for Mike's puzzle game, *Tritryst.*



» Kevin pitched *Full Tilt! Pinball* to more than 20 publishers, before Maxis snapped the title up – Microsoft ironically had 'no interest' in publishing it.

SKULDUGGERY

The aim of the pirate-themed Skulduggery table is to find Peg Leg's buried treasure, by either discovering all the pieces to his treasure map, or completing a set of minigames. Game modes take various forms, ranging from sword fights, to naval battles and even escaping the Bermuda Triangle. Skulduggery features four flippers, spread across the table, for a versatile, if somewhat challenging, layout.



» After *3D Pinball* for Windows shipped, Kevin spoke with a classic pinball designer, and worked his feedback into *Full Tilt! Pinball*.

"The flippers haunted me. They had to feel right, and a simple rigid physics model wasn't good enough"

MIKE SANDIGE

TILT! HARDER

3D PINBALL AT ITS WILDEST AND WHACKIEST

Maxis was so happy with the first *Full Tilt!* title that it offered Cinematronics advance deals for two more games, without even asking for a demo or design first. Aside from the puzzle game *Marble Drop*, the team produced a sequel called *Full Tilt! 2 Pinball*. *Full Tilt! 2* built upon the features of the first game, while playing up the 3D aspect, with larger tables designed to better resemble the physical layout of a real pinball table. Despite some glitches, it boasts not only enhanced graphics but sound too, with each table oozing style, personality and charm.

The first and perhaps most balanced table, Mad Scientist, is set within an ominous laboratory. Players must collect body parts, raid graveyards, stave off an angry mob and even produce an elixir of life, in order to build their very own Frankenstein's Monster. Captain Hero takes a lighter tone, with a comic book good-versus-evil theme, and minigames revolving around saving buildings, rescuing a damsel in distress and battling the bad guy. Alien Daze, meanwhile, is a little of both, with players tasked not only with drawing crop circles and capturing the mythical bigfoot, but abducting unsuspecting humans.

However, the timing could not have been worse. Embroiled in a battle with the Department Of Justice, and a reputation as 'the evil empire', Microsoft was "sensitive to the idea of running around with a gun and blasting things". Its feedback to Cinematronics was, "We've got to get rid of that death thing." David's team swapped out the bullets for glue, so instead of dying, characters would just be stuck to the floor for a period of time. "Basically, every time we would ship them a demo, they kept giving feedback that made the game worse and worse." Eventually, even Microsoft lost its appetite for the project, and after months of hard work Cinematronics had run yet another ship aground.

David called Microsoft's pioneering games evangelist, Alex St John, and lamented the state of the game they had now come to call '*Glue-Em*', or more appropriately, '*Gloom*'. Desperate, he asked, "What kind of game could I build that could ship with Windows – that they couldn't screw up?" Alex answered, "Well, Bill likes pinball." David recalls, "I said, 'Alex, I can make pinball.' I think he could sense my desperation and he was like, 'Well, what would be special about your pinball?'" The answer: "Mine will be in 3D."

The next day, David sent Microsoft a brief, describing the game '*Pinball Wizard*', as if it was already complete. The team loved it, but they wanted to see the game for itself. "I told them, it's a beta thing right now, with lots of bugs, and it's not really ready to play. And they said, 'We're developers too, don't worry, we understand bugs.'" Panicked, over a three-day weekend, David snuck his team into an arcade to lift the glass off pinball machines and take photographs of the controls, bumpers, flippers and targets. They then scanned them in, and laid them out to resemble a digital pinball table, but because of the inconsistent lighting

and perspective, "it looked like a ransom note pinball machine". Undeterred, David printed it out on a "really bad thermal printer" and sent it over on a "kind of broken fax machine". Once again, Microsoft loved it, but now its higher-ups wanted to play it, and they wanted it ready in time to ship with Windows 95 – six months away.

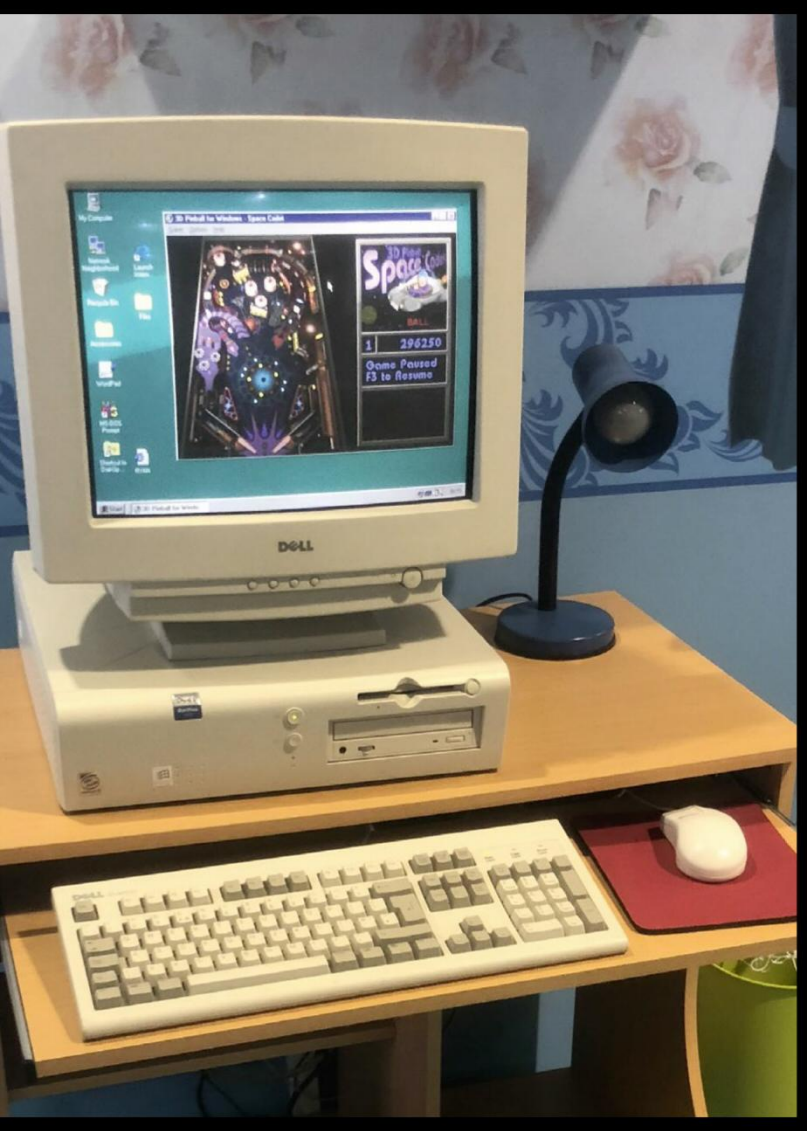
Gambling on a delayed Windows launch, Cinematronics hit the ground running on *3D Pinball* for Windows. The game consisted of a single pinball table – Space Cadet. Having previously studied under the game design theoretician Chris Crawford, Kevin was in charge of designing the game, and started with the most logical first step – "I studied, analysed and dissected every pinball machine I could find". Aside from the local arcade, he explored Santa Cruz's old boardwalk and beachside amusement park, dating back to the 1920s. "The paint was so worn down on some of those tables that there was nothing but wood visible where the ball most frequently tracked. I had dug up every book on pinball I could find, but being able to play many of the classic tables was much more helpful."

In the process, he created a library of every pinball mechanic, player dynamic and table pattern he could find, before sorting them into three 'layers' of gameplay. On a fundamental level, even simply mashing the flippers blindly should be fun. "You'd hit some random things, lights would go off, stuff would happen. You'd have no idea what any of that meant, but your score would increase and you'd make some progress and feel good about it." Amazingly, the inspiration for this was fighting games.

> "I'd tape nerf gun ammo onto the keyboard keys to hold the flippers upright"
> **MIKE SANDIGE**

The second layer involved recognising patterns to seemingly random flipper actions. "Finally, once the player was comfortable controlling the ball, they'd start to recognize how stringing a series of actions together opened up larger rewards. Hit the ramp three times and earn a large bonus. Drop all the targets in a set and initiate a mode. Complete a mode and earn an extra ball."

» After some tweaking from Microsoft's Dave Plummer, *3D Pinball* became a mainstay of Windows from Windows 95 until XP.



The physics engine itself was built by Mike, who tweaked material properties with Kevin until they "felt right". He designed the pinball engine to be almost entirely data-driven, and "agnostic to the table being played", so that designers could adjust bumpers, kickers and flippers to suit their tables. "The flippers haunted me," he reflects. "They had to feel right, and a simple rigid physics model wasn't good enough." Due to the high speed of the ball, an≠d the flipper, Mike had to make certain mathematical trade-offs, which very rarely resulted in the ball and flipper models overlapping, and the ball simply passing through.

"The work I did on the flippers took so long that David coined the phrase, 'the world's most expensive flippers'. I would set up multiple machines running the game overnight with the ball held on upright flippers, to make sure that the physics precision was sufficient to keep the ball from ever falling through. I'd tape Nerf gun ammo onto the keyboard keys to hold the flippers upright." David says he used to lie awake at night wondering if the company was going to fail over a set of flippers. "Mike has grey hair now, and I think a lot of that grey is probably due to the difficulty of making the flipper work properly."

Six months into development, Cinematronics formalised the deal with Microsoft. As the game gathered steam, the team not only grew in size, but began to clock in 100-hour weeks. "To say we worked closely together would be an understatement," says Kevin. Because the deal with Microsoft was nonexclusive, Kevin began pitching a full retail title to traditional publishers. In May 1995, he scored a deal with Maxis to publish *Full Tilt! Pinball* – which would include two more tables, the pirate-themed Skulduggery and fantasy-inspired Dragon's Keep.

Although David assumed that pinball "ought to be safe" from Microsoft meddling, before long, the Microsoft team came up with the idea of building a Windows 95-themed table. "Instead of bumpers, there'd be clouds and you'd play on a blue sky. Immediately, I thought, 'this is a very bad idea'." Unwilling to embark down that path, David shared his tools with Microsoft, and invited them to create their own table, so they could ship two with Windows. Mike recalls, "They did end up providing a table, but the idea didn't really work. The table was pretty unattractive, and everyone agreed to leave it out."

» When Microsoft asked David what would be unique about his pinball game, thinking on his toes, he said "Mine will be in 3D".

Once Space Cadet was complete, Microsoft employee Dave Plummer, who invented Task Manager, was responsible for adapting it to the Windows NT framework. Because NT was designed to run on any processor, the parts of the game that were written in x86 assembly language had to be reworked into C. Before he got his hands on it, another Microsoft employee had already tweaked it, changing the Maxis and Cinematronics logos to a darker, less obvious colour. The title was shipped not only with Microsoft Plus! 95, but Windows NT, 2000, ME and XP too – and it took Microsoft years to root out Cinematronics' buried Easter eggs. Dave Plummer says, "Really, all credit for the game's design has to go to the original designers, but having it up and running portably across the MIPS, Alpha, PowerPC and x86 in 1994 was a big deal at the time – I'm really glad we were able to ship it across the entire NT line."

In 1994, "for a hungry startup living on ramen noodles and sleeping on a couch" the Microsoft licence provided a vital lifeline to Cinematronics, as it moved to Austin, Texas. It also allowed the team to complete most of the legwork for the full retail title, which would be published by Maxis. The subsequent *Full Tilt! Pinball* was more polished than the Windows bundle, with 16-bit and 18-bit art rather than 8-bit, and higher resolution graphics. In all, the title generated some $545,000 for Cinematronics. In 1996, just two years after its foundation, Maxis purchased the company – largely for its Windows expertise. For David, it was a vindication of his vision.

When Windows Vista transitioned to 64-bit, Microsoft finally pulled the game, supposedly due to a collision detection error they could not fix in time for launch. Regardless, it endures as one of the most widely distributed videogames of all time. Still close friends with Mike and Kevin, David looks back fondly on his time at the company. "It was a real touch and go thing there, about as close a thing as you can imagine in life," he laughs. "I've had other startups since then, and have obviously learned and done better from an execution standpoint, but I don't think I've done anything that was quite as much fun as that." ✱

RGT

Retro Gamer Travels

LOST IN TRANSLATION

How the rest of the world experienced your favourite games

JAP

» [PlayStation] The Japanese game features stylish presentation and a rather deep, engaging sci-fi plot.

ACE COMBAT 3: ELECTROSPHERE JPN → ROW

Japan → ROW

ACE COMBAT 3: ELECTROSPHERE
Departing: 1999

FORMAT
PlayStation

DEVELOPER
Namco

YEAR
1999

ORIGIN
Japan

LOCALISED FOR
Rest Of World

REASONS
Commercial

These days it's common to hear cries that a western version of a Japanese game has been 'butchered', often over relatively inconsequential changes. That term is far more appropriately used for something like *Ace Combat 3: Electrosphere*, an entry in Namco's aerial warfare series that received radically different releases in Japan and the west.

The original version of the game depicted a war between the Neucom and General Resource corporations. This plot was told in some depth, and was fleshed out with anime cutscenes featuring a variety of characters that could accompany you on missions, and radio chatter from those characters during the game's 52 missions. What's more, it was a branching story, with various factions to join and a variety of possible endings. The ambitious project spanned two discs and when originally announced for the west, both of them were supposed to be localised in full.

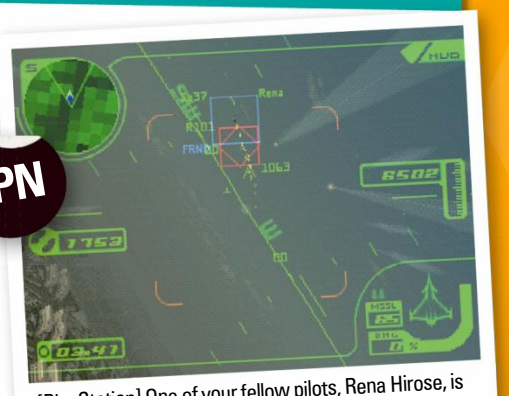
Unfortunately, *Ace Combat 3* didn't perform exceptionally well in Japan, barely surpassing the sales of its predecessor despite the considerable extra resources that went into its production. As a result, budget cuts were imposed on the western release, which was reduced to a single disc and subjected to various content cuts. Although the inter-corporate war plot is retained, it's heavily simplified – the cutscenes are replaced with text slideshows, all of the characters are removed and the branching paths have been replaced with a single linear path. Even the outcome of the story is quite different. Worse yet, about a third of the missions were scrapped – 16 in total – and your intelligent allies have been removed from missions along with their radio chatter, since they no longer appear in the plot.

Ace Combat fans have long campaigned for a proper official translation, but Namco has no plans to release one. As a result, fans released their own translation of the Japanese game in 2016.

Neuwork Inc. and General Resource are bitter rivals
in the competition for economic domination of the
world. A defection of key scientists from General
Resource to Neuwork is the latest tactical coup in
this atmosphere of rising tensions.

ROW

» [PlayStation] We had to settle for this lame static text treatment for the story.



JPN

» [PlayStation] One of your fellow pilots, Rena Hirose, is helping you out in this particular battle.

ROW

» [PlayStation] Rena can't help you in the US and European versions, because she's been removed from the mission

ECONOMY

COSMO GANG: THE PUZZLE

JPN ➔ ROW
Japan ➔ ROW

COSMO GANG: THE PUZZLE
Departing: 1993

FORMAT
SNES

DEVELOPER
Namco

YEAR
1993

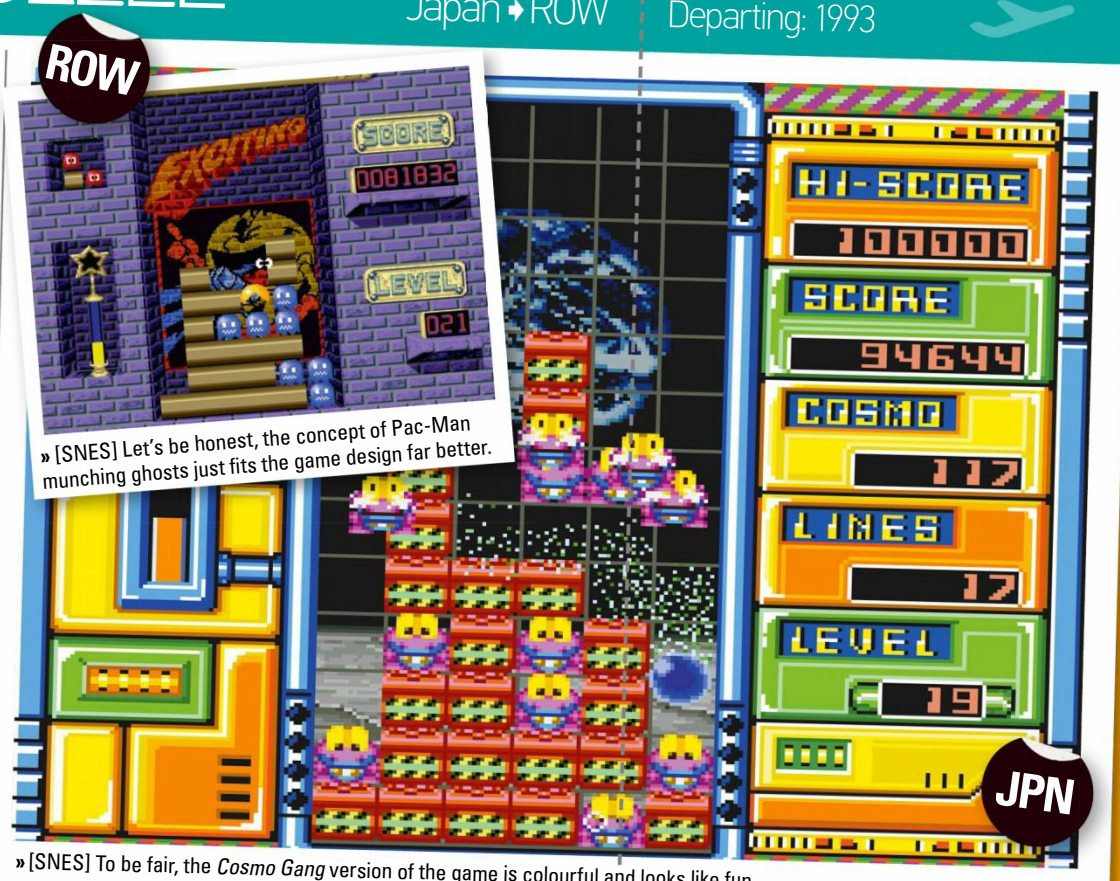
ORIGIN
Japan

LOCALISED FOR
Rest Of World

REASONS
Commercial

Here's a good reminder that localisation often improves games. *Cosmo Gang: The Puzzle* is an arcade spin-off of Namco's electromechanical arcade gun game, *Cosmo Gang*. When the arcade version was exported across the world, it went by its original name, but when the SNES conversion left Japan the graphics and sound were given a complete overhaul, turning the game into *Pac-Attack*. The mechanics are basically identical, save for the minor improvement of being able to rotate blocks with A and Y as well as B.

As much as we love the original *Cosmo Gang* arcade puzzler, this change makes a lot of sense. The *Cosmo Gang* games have only ever had a cult audience, so *Pac-Man* is a considerably more commercially appealing property due to its character's enduring popularity. But beyond that, the mechanical hook of chomping through a stack of blue ghosts is so compelling and obvious for *Pac-Man* that we'd never have guessed that the game was designed without any intended connection to the series. Namco evidently thought it was a good fit too, as further releases of the game for the Game Boy, Game Gear, Mega Drive and CD-i all used the *Pac-Man* branding, too.



» [SNES] Let's be honest, the concept of Pac-Man munching ghosts just fits the game design far better.

» [SNES] To be fair, the *Cosmo Gang* version of the game is colourful and looks like fun.

ECONOMY

PUZZNIC

JPN ➔ ROW
Japan ➔ Germany

PUZZNIC
Departing: 1989

FORMAT
Arcade

DEVELOPER
Taito

YEAR
1989

ORIGIN
Japan

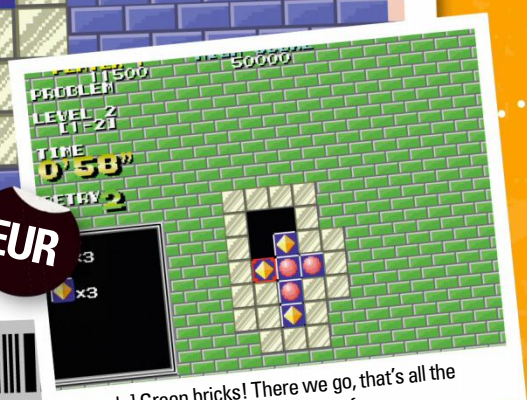
LOCALISED FOR
Europe

REASONS
Sex/Gender

■ **Taito didn't seem to have too much faith in *Puzznic* to succeed on its own merits.** We're not sure why, because it's a pretty good puzzle game – rather than adopting the 'falling block' routine popularised by *Tetris*, it allows you to directly shift blocks left and right to form matching pairs. The difficulty comes from the fact that they're affected by gravity and can't move up, and there are also moving platforms to contend with.

In its international form, that's all there is to *Puzznic*. It's good clean fun, if a little visually bland – the only real excitement comes from the changing colours of the background bricks, once every few stages. But Taito had a different plan for the Japanese market, and surprisingly carried it through to the American audience too. That plan was, not to put too fine a point on it, images of naked women. After each successfully cleared stage, some of the background bricks will be removed to reveal a little more of one of the game's models. Perhaps unsurprisingly, the home conversions more closely resembled the European arcade release, with various coloured brick backgrounds and a distinct lack of sex appeal.

» [Arcade] Nothing to see here – we don't need more reasons for shops to put us on the top shelf.



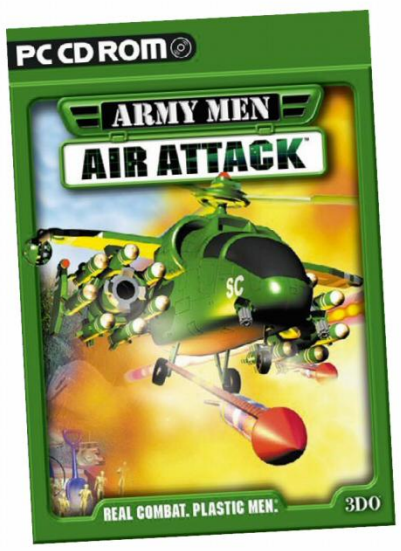
» [Arcade] Green bricks! There we go, that's all the excitement you lot need. Good, clean fun.

ECONOMY

aqua pacific

We examine how the small Leamington Spa developer ended up creating an impressive number of titles over the course of a decade by using innovative techniques to speed up the development process

Words by David Crookes



» [PC] *Army Men: Air Attack* was ported from PlayStation to PC with Aqua Pacific working on enhancing the graphics and resolution.

Paul Ranson isn't backwards in coming forwards when discussing the reasons for setting up Aqua Pacific. "I sold my previous company, Big Red Software, to Domark which was taken over by Eidos and I fell out with them," he says. "I think that's the easiest way to describe it."

Indeed, creative differences had made life difficult for Paul who had been used to running his own company. He was suddenly being dictated to by a large and growing corporate business that wanted to push Big Red in a direction he simply wasn't comfortable with.

"There wasn't any creative urge for us, short of being bullied into making more serious content when our heritage was games for children," Paul says. "I just thought, rather than get old and grey, I should go off and create a new company, and so in 1997 I did just that."

The first project Aqua Pacific undertook was a port of Europress' *Network Q RAC Rally* to an arcade machine developed by Paul's friend. Paul also worked on the arcade shooter *ACM 1918* that was set at the end of the first world war. "This was an unmitigated disaster," he says of the game that reviewed poorly. "It was briefly published by a Dutch company called Project Two Interactive but it wasn't really just a distributor with aspirations and it didn't understand the complexity of making games. It wasn't completely covered in glory."

Thankfully, the port of *Network Q RAC Rally* was more successful and caught the attention of Infogrames. The French company asked Aqua Pacific to develop the PC version of a new PlayStation rally game called *V-Rally* in partnership with White Park Bay Software. Paul and his team got to work.

In order to make development more efficient, however, Paul began to think of smarter ways of working. "With the *V-Rally* project, we essentially developed a PlayStation emulator for the PC which allowed us to port pixel-perfect games in the most cost-effective ways," explains Paul, who worked on the project with Aqua Pacific's first staff developers, Craig Weeks and Garry Hughes.

» [PS2] Aqua Pacific's team developed PlayStation 2 games from scratch, which included *GT Racers* in 2004.

» [PlayStation] Working with Supersonic Software, *Pong: The Next Level* was converted from PlayStation to PC.

TIMELINE

1997 ■ Forms in Leamington Spa by former Big Red founder Paul Ranson.

1997 ■ Develops arcade shooter *ACM 1918* to lukewarm reviews.

1998 ■ Creates a PlayStation-to-PC and PC-to-PlayStation emulator.

1999 ■ *V-Rally* becomes first game to be ported to PC using the emulator.

1999 ■ Signs a contract to convert *Titus The Fox* to Game Boy Color.

1999 ■ Works on the conversion of *GP 500* using Always 3D rendering software.

2000 ■ Expands capabilities to include Symbian, Windows CE and Java development.

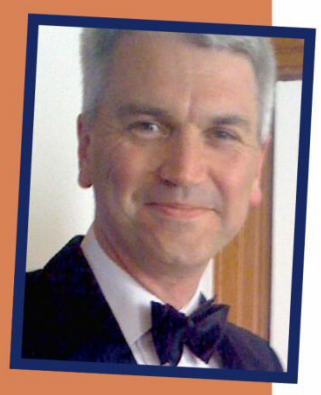
2000 ■ Is hired to convert PC edutainment titles to PlayStation for Ubisoft.

2001 ■ Continues to create games for Nintendo handhelds as well as ports.

» [PC] Aqua Pacific took the PlayStation code for *Army Men: Sarge's Heroes* and created a faithful port for PC using the DirectX 7 interface.

WHERE ARE THEY NOW?

PAUL RANSON



■ After establishing Aqua Pacific and seeing it named the '97th most successful studio' in the world by *Develop* magazine in 2005, hard times caused it to close and Paul Ranson set up Slam Productions in 2007 to develop games on mobile phones and consoles. He specialised in family and child-friendly games such as *Family Fortunes* and *Who Wants To Be A Millionaire?* but closed the company in 2011 and moved to become a non-exec director of DNA Dynamics before becoming a development director for Serious Games International. He founded Hosteroo, an Airbnb property management business in 2015 along with the consultancy Smash Thinking and he also works as a visiting lecturer at the University Of Wales.

"It meant that, as a small studio, we could then replicate any PlayStation game that we got our hands on the source code for," Paul says. It wasn't long before we were able to turn games around in a matter of weeks and sometimes days."

Aqua Pacific's plan was to work to a low budget and take on young, inexperienced talent straight from university. There was early work on games such as *GP 500* which involved inserting a render system called Always 3D into game code provided by Melbourne House, but Paul believed the porting side of the industry would be more predictable and soon the company was taking on an increasing number of contracts.

To do so, Paul went on a recruitment drive, using the money obtained during the Eidos buyout, to eventually employ 15 developers. Aqua Pacific's staff tended to be technical and their job was to ensure that any provided source code would run perfectly well under emulation. An informal arrangement was also set up with Full Fat, an independent developer set up in 1996, which helped with any graphics which needed to be done. "My brother worked for the company and I invested in it," Paul says.

In fact, Paul took full advantage of the contacts he had built up during his career, and it certainly helped that his rented premises in Morrell Street, Leamington Spa, put him at the heart of a bustling development scene. "Everybody knew everybody and it's still like that," Paul says. "We'd drink together, our kids would go to the same schools and so a lot of work came informally. Since we had a level of trust, companies would share the source code of their completed PlayStation games and we'd work with it. This was crucial because tech guys tend to be very protective of their source code."

> "I was only interested in making sure my lads got paid because salary is the biggest issue in running a games studio"
> Paul Ranson

In 1999, for instance, *Pong: The Next Level* was converted to PC on behalf of Leamington Spa-based Supersonic Software, and it was published by Hasbro. "I went along to Hasbro with Supersonic and said that we could have the game turned around in ten days if it was prepared to pay," Paul says. "The deals were very informal, never written down, and a lot of the time we weren't even credited but I took a pragmatic attitude and I was only interested in making sure my lads got paid because salary is the biggest issue in running a games studio."

Even so, deep in the back of Paul's mind was a concern that producing conversions too quickly could backfire. "After we had a handshake and got the source code, we'd have a port by the following weekend but the dilemma we faced was that, in doing things so quickly, people start to presume the cost must be lower so we had to stage manage the complexities."

It certainly helped that many in the industry believed Aqua Pacific's endeavours were impossible. "I'd get into these ludicrous arguments with people, such as the technical director of Eidos who would tell me that I couldn't do what I was saying I could do when I was clearly doing it over and over again. I guess that we were bringing an industrial process into what people in the so-called 'know' thought was a creative endeavour."

Rather than put all of its eggs in one basket, however, Aqua Pacific also looked to other platforms, notably the Game Boy Color. "This was down to the fact that the Game Boy was a stripped-down Z80 and it presented the same sort of development approach as the Spectrum and Amstrad that me, Garry and Craig had worked on for years (Garry and I had probably developed 50 or so games for these computers by that time)," Paul explains.

» [PS2] *Real World Golf* made use of the Gametrak system which would allow players to track their swing in real time.

2002 ■ Hits publisher problems with *Agassi Tennis Generation* 2002 for PlayStation 2.

2003 ■ Starts making good use of its sports game engine with the release of many tennis games.

2004 ■ Tweaks to the tennis engine enables the team to make golf titles.

2005 ■ Named 97th most successful game developer in the world by *Develop*.

2005 ■ *Real World Golf* pulls in £1.78 million revenue.

2006 ■ Releases more golf games as well as titles for budget publishers.

2007 ■ Develops *Realplay Golf* for PS2 using motion-sensitive controls.

2008 ■ Finds moving to the next-gen consoles difficult and closes.

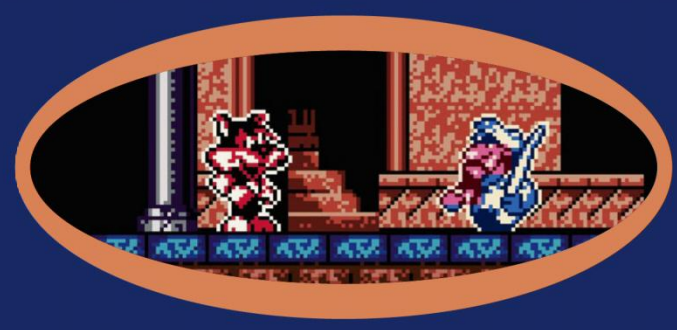
DNA OF AQUA PACIFIC

EMULATED CONVERSIONS

■ Armed with a PlayStation emulator for the PC, Aqua Pacific was able to speedily port many games from console to computer. PlayStation conversions would each be made to run on basic 166MMX PCs with 16MB of RAM, making use of 16-bit colour with accelerated versions displaying in 640x480 resolution.

CHILDREN'S GAMES

■ Paul Ranson's background with Big Red Software involved the production of games for children. With Aqua Pacific, he sought to develop content for games-based learning, not only working with the British Council and the Learning And Skills Council but also with companies such as Ubisoft on a set of *Rayman* edutainment titles.



HANDHELD HERITAGE

■ Having hired developers who had been involved in gaming since the Eighties, Aqua Pacific was able to develop many games for the Z80-based Game Boy Color entirely from scratch, among which were many cute titles including *Titus The Fox*. The developer also made many games for the 32-bit Game Boy Advance.

» [Game Boy Advance] Thanks to the development of an in-house football game engine, many soccer titles, including *Zidane Soccer Generation,* were made.

» [Game Boy Color] Aqua Pacific employed staff which had previously worked on 8-bit and 16-bit games and so it found developing handheld titles, such as *Babe And Friends,* to be rather straightforward.

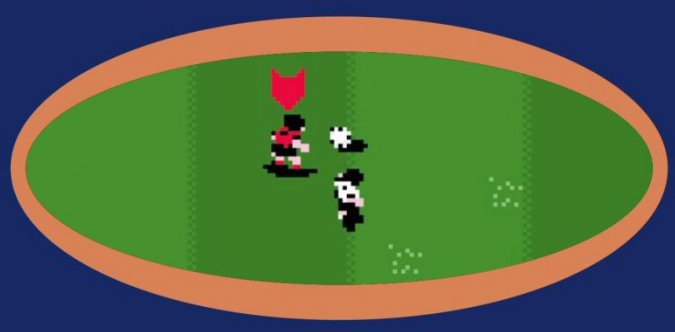
> "We'd get the occasional visit from Sony which wanted to know how we could be taking on contacts for two or three PlayStation games when we only had one dev kit, but it just meant having to play cat-and-mouse"
>
> Paul Ranson

Titles included *Carmageddon* for the Game Boy Color (based on *Carmageddon II)* as well as *Babe And Friends* and *Titus The Fox*. In these cases, Aqua Pacific would develop from scratch rather than use any emulation technology, but it was always developing with one eye on reusable code. "We ended up being the force behind an insane number of soccer games using our football engine, creating titles such as *Mia Hamm Soccer Shootout*, *European Super League* and *Zidane Soccer Generation*," Paul says.

The work-for-hire ports became the studio's bread and butter, however, including PC-to-PlayStation conversions of the *Carmageddon* Physics Engine and *Adibou Science*. "We were on the cusp of legality and forever paranoid that Sony would find out what we were doing," Paul remembers. "We were also worried about the fluidity of the workforce: people could move from us to Eidos and to Sony and they find out what we were doing that way."

And yet it made financial sense. Aqua Pacific's system got around the need to stump up for more than one development kit – a real cost-saver given each costs in excess of £20,000. "Our emulation capacity meant that we could develop games on a PC and then, at the last minute, jump on to our solitary development kit," Paul recalls. "It did mean we would get the occasional visit from Sony which wanted to know how we could be taking on contacts for two or three PlayStation games when we only had one dev kit, but it just meant having to play cat-and-mouse."

As a new generation of gaming loomed, a new approach was needed. Emulating a PlayStation 2 on the PC was more difficult at the time so the team developed a proprietary technology called SLAM (or Scripted Language Arcade Machine). Originally created to produce the front-end menu and options systems for its games, it was as easy as Flash to learn and code. Aqua Pacific could take on less-experienced programmers whenever it went on a recruitment drive, and it also saved the company having to buy many dev kits.



SPORTS GAMES

■ *Agassi Tennis Generation* was Aqua Pacific's first tennis project and it was developed using Criterion's RenderWare engine. The code underpinned a host of further tennis and golf games which became Aqua Pacific's staple for much of its life in the Noughties. It also made many football games for the Game Boy range.

LEAMINGTON SPA

■ Being based in one of the hotbeds of UK videogame development benefitted Aqua Pacific from the start. Paul Ranson had made many contacts in the Warwickshire town prior to setting up the company. This helped him to acquire development contracts from local developers and led to regular work.

» [PlayStation] With *V-Rally*, Aqua Pacific not only developed its PlayStation emulator for PC in collaboration with White Park Bay Software, it also developed an arcade cabinet version.

» [PS2] *International Golf Pro* was an arcade-style golfing game developed for the budget publisher Oxygen Interactive.

» [PC] Having been developed for the PlayStation, Aqua Pacific converted *Lucky Luke* to work on non-accelerated PCs.

» [PC] For *GP 500*, Aqua Pacific made use of Interactive Studios' Always 3D rendering software.

That's because a game developed entirely on PC using SLAM could be made to run on the Xbox, PlayStation, PlayStation 2, PlayStation Portable and, eventually, Xbox 360 among other platforms including those by Nintendo. Paul used it to convince the console manufacturers that this is why Aqua Pacific didn't need more dev kits. "We even did it for Linux and browsers but the technique was sneered at," Paul says.

One of the games to benefit was *Lucky Luke* for Infogrames. Aqua Pacific was also making use of the RenderWare game engine for the development of PlayStation 2 games. Having already developed *All Star Tennis 2000* for Windows on behalf of Ubisoft, Aqua Pacific got to work on other tennis games including *Agassi Tennis Generation 2002* although publisher Cryo Interactive Entertainment filed for bankruptcy and Paul had to make half of his staff redundant before managing to acquire the source code and gain approval from Sony to release *Agassi* in August 2002.

The game proved to be a company-saver. "We went on to make a heap of tennis games including *Perfect Ace* and *International Tennis Pro*. We also iterated our golf and racing games, working with Oxygen, Midas, PlayIt and Mastertronic. Our golf games included *International Golf Pro*, *Real World Golf* (which made use of Gametrak's motion detector), *Leaderboard Golf*, *Real World Golf 2007* and *Realplay Golf*. We had a first-person shooter in development but it was never commercially released."

Unfortunately, though, despite lots of success with sporting titles, trouble was still brewing. "RenderWare had been purchased by EA in 2004 which made development more expensive since we'd previously had an informal agreement for its use. We also had to jump through hoops to even get permission to obtain a development licence for the next-gen consoles from Sony and Microsoft," Paul says.

"The guys running the console companies were obsessed with tech-heavy bullshit rather than the production of entertainment that I believe we focused on and, being rooted to the RenderWare platform, we did not care about 'tech' GPUs, CPUs and so on. As time went on, we'd worked on games such as *GT Racers*, *Sim Chemist*, *Dr Doolittle* and *Pinocchio* but we had exhausted the PlayStation 2 and PC market and never really made money because of piracy."

After funding salaries out of his own pocket and seeing his mortgage shoot up, Paul ended up closing the company. "It was a Friday afternoon – 25 January 2008 – and I waved goodbye to everyone," he says. By this point, Aqua Pacific had made as many as 150 games. "We were a little games company creating titles against insurmountable odds," Paul says.

Philip and Andrew Oliver of Blitz Games stepped in to employ the majority of the old Aqua Pacific staff. Meanwhile, two weeks after closing, EA called asking for a quote for a *Tiger Woods* game but Paul had already moved on, setting up a new company called SLAM Productions which moved towards Wii and DS games production and concentrated on casual games.

Still, he looks back at Aqua Pacific with great fondness. "We were going up against developers who had 200 people on £40,000 a year, charging £2 million for games, whereas we had 20 people in the end and were charging £150,000," Paul says. "Back then it was seen as us blowing smoke but today it makes a lot of sense."

» PUSHING THE LIMITS

Street Fighter Alpha 2

Could this unlikely SNES conversion really match up to the 32-bit offerings from Nintendo's rivals?

» **PLATFORM:** SNES » **RELEASED:** 1996 » **DEVELOPER:** CAPCOM

It's fair to say that nobody was expecting the SNES to receive a conversion of *Street Fighter Alpha 2*. Nintendo's 16-bit platform was looking a little long in the tooth by 1996, and the first game in the prequel series had been converted exclusively to the new 32-bit consoles. What's more, questions surely had to be asked about the feasibility of such a conversion – after all, when even the mighty PlayStation couldn't bring over all the animation and arcade details, what hope did the ageing SNES have?

When the game came out, the doubters were proved wrong. Not only was the SNES running a cutting-edge 2D fighter, but it was doing it pretty well. Nobody would mistake it for an arcade-perfect port thanks to its small sprites, cut-back animation and compressed play area. But it contained all of the characters, backgrounds and moves, and played authentically enough. The key was the use of the S-DD1 chip in the cartridge, which allowed for quick decompression of the huge amounts of data contained in the game's 32-megabit ROM. This chip isn't one of the more common SNES enhancement chips, being used in only one other game (Squaresoft's *Star Ocean*).

The conversion was acclaimed in its day, as its shortcomings were seen as secondary, and it gave players without the new consoles a chance to enjoy the latest game in the premier 2D fighting series. *GamesMaster* gave the game 87%, and *CVG*'s Ed Lomas gave it 4/5, commenting that while it was "pretty jerky and slow" and "has lost a lot of the impact of the arcade and 32-bit home versions," it "plays very similarly to the arcade" and "comes highly recommended, as long as you're prepared to take some time to get used to it".

The SNES version of *Street Fighter Alpha 2* obviously isn't the preferred version to play today, with arcade-perfect versions available on modern consoles, so it's really a matter of historical curiosity. However, due to its status as the only Nintendo version of the game until *Street Fighter 30th Anniversary* arrived on Switch, it reappeared on the Wii, Wii U and 3DS Virtual Console services. As a result, it's still readily available if you decide to try this improbable conversion for yourself.

HOW IT PUSHED THE LIMITS...

Cunning Compression

Without the use of heavy-duty compression and a chip to handle the work of unpacking it all, there's no way that the SNES could have offered the full *Street Fighter Alpha 2* roster of 18 characters, plus one secret addition.

Careful Cutbacks

Even with assistance, the SNES would struggle with such detailed graphics. By making use of only a limited portion of the screen and removing certain frames of animation, Capcom retained a mostly faithful look.

Ambitious Audio

Alpha 2 swaps out a lot of audio data, which you can see in the game's frequent short pauses whenever it's convenient. Music has to be constructed from very few samples to fit all the voice clips into memory.

Incredible Intro

Where the SNES version puts the PlayStation and PC conversions to shame is in its intro sequence. Where those machines rely on an FMV recording of the arcade intro, the SNES, like the Saturn, uses sprites.

IT'S GOOD TO TALK

Retro Gaming Podcasts Special

The past decade has seen the emergence of numerous audio shows dedicated to our favourite hobby. Here's a look at a few of the leading lights from the retro gaming podcast scene

Words by Lewis Packwood

» Before retro podcasts, we had Shane Monroe's (right) *Retro Gaming Radio* show.

» From left to right: Archer McLean, Dean Swain, Jim Bagley, Steve and Paul from *Retro Asylum*, and Steve Turner.

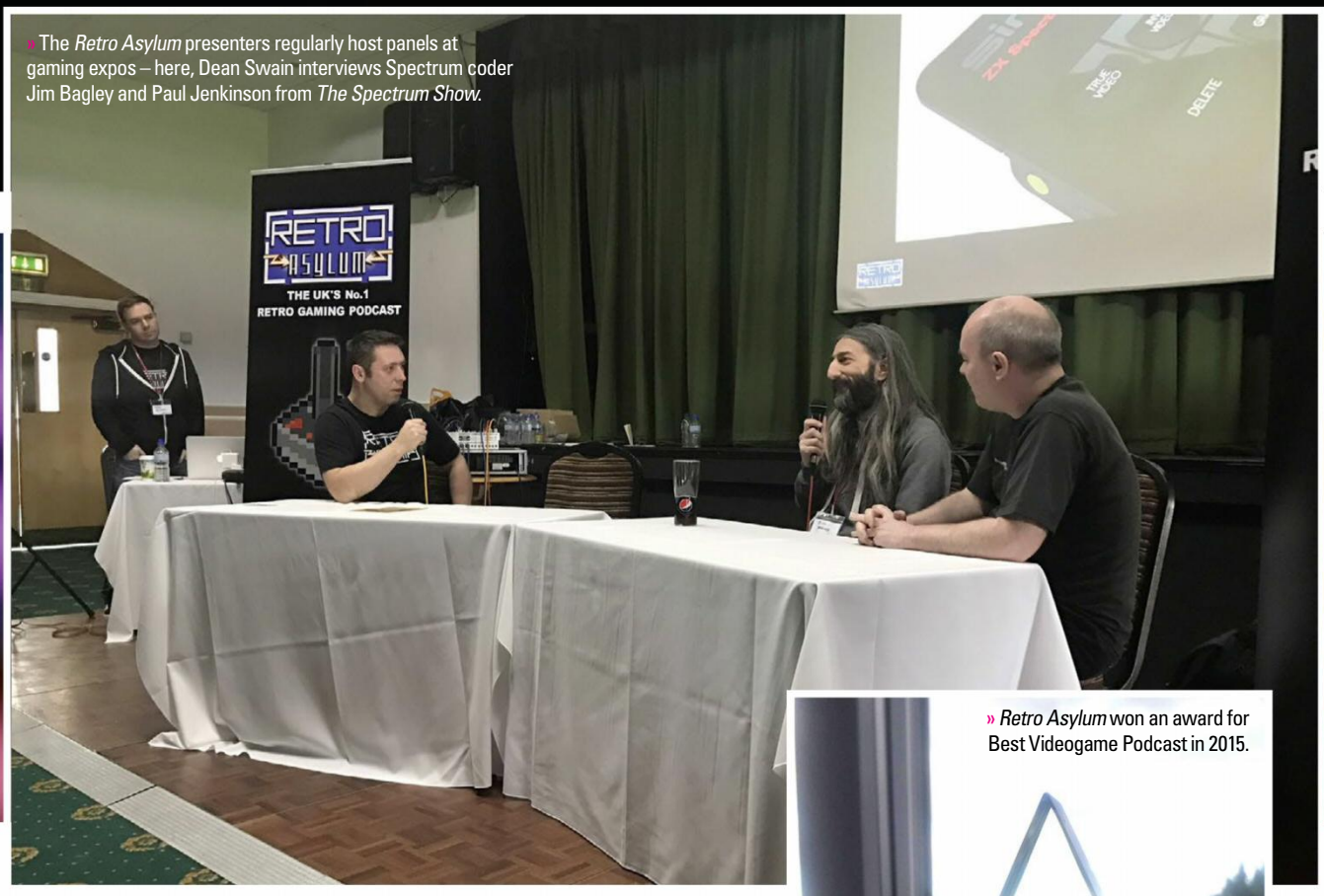
If we're going to talk about retro gaming podcasts, we should probably start with the granddaddy of them all. The US-based *Retronauts* began back in 2006, not long after the very emergence of podcasts as a concept – and although host Jeremy Parish isn't sure whether it was the first ever podcast dedicated to retro gaming, he's certain it was definitely *one* of them. "Around that time I was at *1up.com*, and some of the people on staff got wind of […] this new thing happening called podcasts," he recalls. "So I said, you know, it'd be fun to do something focused on classic gaming because that's kind of an underserved area – and that was it."

The first episode talked about the launch of *Final Fantasy III* for the then-current Nintendo DS, remembers Jeremy, which marked the first time that the game had been localised into English. "To me, that was really sort of the mission statement for the podcast: not just to talk about old games, but to put them into perspective," Jeremy highlights. "Like, tie them to something recent or current, tie them to the actual state of gaming today and show why classic games are relevant – and what's been built on what has come before."

Since then, *Retronauts* has carved out an enviable reputation for its deep dives into old games, something that requires meticulous research: "We usually spend about a month or so putting together notes in advance of big recording sessions," says Jeremy. And the show, which is cohosted by veteran journalist Bob Mackey, regularly welcomes expert guests to talk about particular games, including such industry luminaries as *Ultima* designer Richard Garriott and *Wizardry* creator Robert Woodhead.

But despite all this goodness, *Retronauts* didn't get a lot of love from its original home at *1up.com*. "There wasn't really a huge amount of support for it," says Jeremy. "And it's not that no one saw any value to it, but it was just podcasts were kind of this extra thing that we did, and they wanted us to do them, but on the other hand, they didn't want us to spend too much time on them, because they had no idea how to monetise them… And it got even more challenging once *1up* was absorbed by *IGN*, because *IGN* had a very different philosophy about creativity and about podcasts, and didn't see the value in taking the time to edit and polish podcasts. I'm sure they've changed since then, but at the time they were like, 'Why are you not just posting raw audio?', like, you shouldn't be wasting time on this."

Retronauts would eventually go independent, and now does just-fine-thank-you-very-much with more than 1,500 regular backers on Patreon. And indeed, although companies may have been scratching their heads in the Noughties when it came to working out how to make money from podcasts, thankfully there are plenty of ways for



» The *Retro Asylum* presenters regularly host panels at gaming expos – here, Dean Swain interviews Spectrum coder Jim Bagley and Paul Jenkinson from *The Spectrum Show*.

» *Retro Asylum* won an award for Best Videogame Podcast in 2015.

» *Maximum Power Up*'s Paul Monaghan meets Mr Biffo, aka Paul Rose.

podcasters to earn a crust through sponsorship and crowdfunding nowadays.

Dean Swain is a cofounder of the UK's number one podcast, *Retro Asylum*, which pulls in around 9,000 downloads in its first week. He began the show back in 2011 because he was frustrated that most of the retro gaming podcasts back then were focused on an American perspective. "At the time when we started there was nothing really talking about the old 8-bit micros, it was all consoles and stuff," he says. "They kept going on about the videogame crash [of 1983], and it didn't really happen over here." Dean and the other presenters of *Retro Asylum* have a strong focus on British computers from the Eighties – the systems they grew up with – but they also feature many other computers and consoles from down the decades.

Since the launch of *Retro Asylum*, a huge number of retro gaming podcasts have popped up in the UK – and Dean welcomes the competition, pointing out that each podcast caters to a different niche. "I think for *Retro Asylum*, we're that bit older, we were there at the time of the early systems, so we can focus on that. I think each podcast has got its own strength, like *The Retro Hour*, the guys there were Amiga owners, and they're a bit younger than us, but they focus a lot on the Amiga, and they really do know it in depth. And *Maximum Power Up*, again they're a little bit younger, and they're into 16-bit consoles." And those are just a few of the varied podcasts on offer: *Ten Pence Arcade*, for instance, focuses heavily on old coin-ops. No doubt there are plenty more retro niches yet to be explored.

Pleasingly, there's a strong sense of community among these would-be rival podcasts. "We all listen to each other's shows," says Dean. "And what we've started to do is advertise each other." *Arcade Attack*, for example, gives regular shoutouts to other retro gaming podcasts, and there's a certain amount of cross-fertilisation among productions. Paul Monaghan, for instance, started out as a presenter on *Retro Asylum* before branching out with his own podcast, *Maximum Power Up* – although he still sometimes appears as a guest on his old proving ground.

Maximum Power Up tends to focus on 16-bit consoles, but it has also covered more modern games, like looking at the *Castlevania* series

HOW TO CREATE YOUR OWN PODCAST

Fancy getting into the podcast game yourself? Here are a few tips to get you started

FIND YOUR NICHE

There are loads of retro gaming podcasts out there, so the key is picking an area you can excel in, says Jeremy Parish from *Retronauts*. "Ask yourself, what's my strength? What do I know a lot about and what can I bring to this space? I think everyone needs to stake their own territory and find something new and different to say."

GET SOME FRIENDS INVOLVED

"Find some people that you're comfortable being on mic with, and that you have some good chemistry with," says Jeremy. "It's certainly possible for a podcast to be one person on their own, but I think podcasts always work better when you have two to three people and they're bouncing conversation off each other."

BUY A DECENT MICROPHONE

The built-in microphone on your PC or Mac just won't cut it for podcasting, so buying a professional microphone is essential. Podcasts like *Retronauts* and *Retro Hour* go one step further by recording in a studio – but even just getting a mid-range mic makes a huge difference. Paul Monaghan from *Maximum Power Up* says he uses a Blue Snowball mic "which was like 40 quid, but it does the job".

BE PREPARED FOR SOME SERIOUS EDITING

Editing is essential for making your podcast enjoyable to listen to. It basically boils down to cutting out dead air, coughs and dull or irrelevant sections of conversation, as well as adding in things like intro music. Audacity and GarageBand are popular free audio-editing tools, although paid-for software packages like Logic Pro and Adobe Audition often provide more functions. But editing can take a long time, says Dan Wood from *The Retro Hour*. "I've had some episodes where I've been sitting there for six hours trying to get an hour-long show to sound great – other weeks I can do it in like an hour and a half."

UPLOAD YOUR PODCAST

In terms of getting your podcast out there, you'll first need to find somewhere to store it. Blogging sites like Wordpress can be used to upload podcasts for a nominal fee, and there are also plenty of dedicated podcast hosting services, such as Buzzsprout. Dedicated services also have the advantage that they often provide tools for getting your podcast onto podcast directories – otherwise, you'll need to generate an RSS feed and manually add it to directories like iTunes and Spotify.

» Ravi Abbott (left) and Dan Wood in the *Retro Hour* studio.

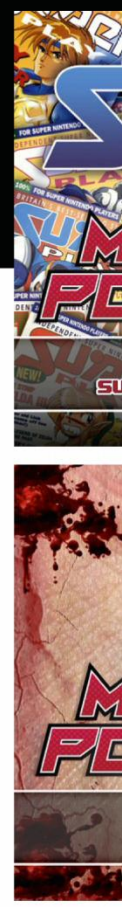
» *The Retro Hour* is recorded in a professional studio, but many podcasts rely on shop-bought microphones and free editing software, such as Audacity.

Photo credit: Karsten Klups

▶ right up to the present day, and even posting episodes on the Wii U and Switch. But it's probably most famous for its coverage of old gaming magazines, a subject that Paul readily admits he's obsessed with. And over the years he has interviewed a remarkable number of legendary journalists from Nineties games mags for the show. "The first ever guest that we got from magazines was Steve Jarratt, who was like a massive, massive name," says Paul. "He did *TOTAL!*, *Official PlayStation Magazine*, *Commodore Format* and everything, and I felt like that was the perfect first magazine guest." Since then, Paul has managed to secure chats with numerous big names such as Jaz Rignall (*Mean Machines*) and Neil West (*Sega Power*), but he reckons that his interview with Gary Penn was one of the most memorable – mostly because, "He's the only person who swears more than me!"

Paul thinks it's important to preserve the stories about the old magazines as told by the people who wrote them. "I want this audio history, interviewing people so they can share their memories, and talk about a time that a lot of [younger] people won't be aware of. You know, it's crazy to think that back in the Nineties you had tons of magazines just for something like the Mega Drive alone."

In a similar way to *Maximum Power Up*, *Retro Hour* (which, in the interests of disclosure, is sponsored by **Retro Gamer**) aims to provide an oral history of gaming. "The idea was that we wanted to get a guest on every single episode," says *Retro Hour* cohost Dan Wood. "Essentially finding out the stories of the games that we grew up playing or the companies whose products we used to buy and getting the real inside story." The podcast has featured an impressive roster of special guests, including *Defender* coder Eugene Jarvis and Atari founder Nolan Bushnell, and for its



GIMME FIVE

Some of the best retro gaming podcasts you can listen to right now

RETRONAUTS

STARTED: 2006

The granddaddy of them all. This American show is hosted by veteran games journalists Jeremy Parish and Bob Mackey, and was one of the first – if not the first – retro gaming podcasts to emerge. There's at least one new episode every week, and it features both retro and retro-inspired games, along with plenty of expert guests.
retronauts.com

RETRO ASYLUM

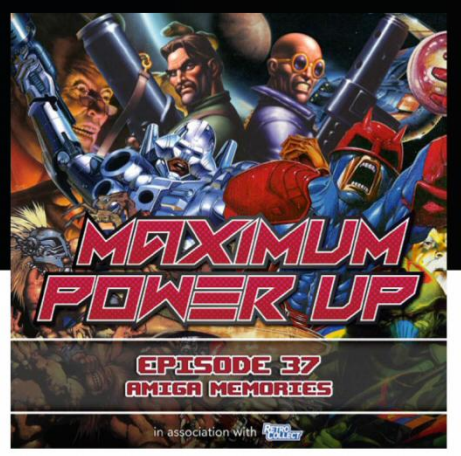
STARTED: 2011

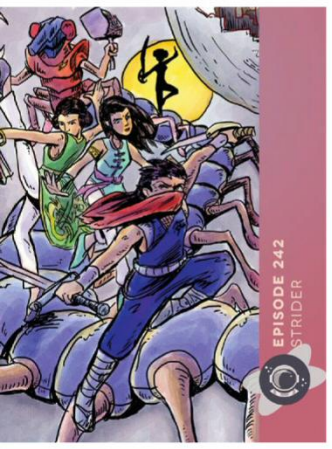
One of the first retro gaming podcasts in the UK, *Retro Asylum* won 'Best Video Game Podcast' in 2015, and claimed the title of 'World's Best Podcast' at the New Media Europe Awards in 2016. The show's rotating cast of presenters focus on titles from the 8-bit and 16-bit eras, as well as running a Games Club where they compete for high scores.
retroasylum.com

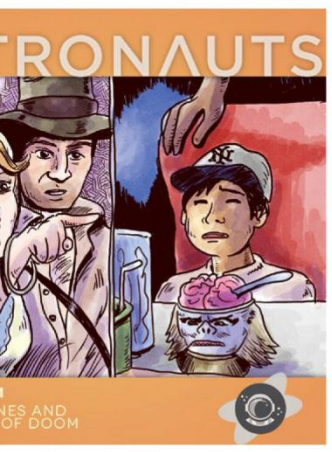
MAXIMUM POWER UP

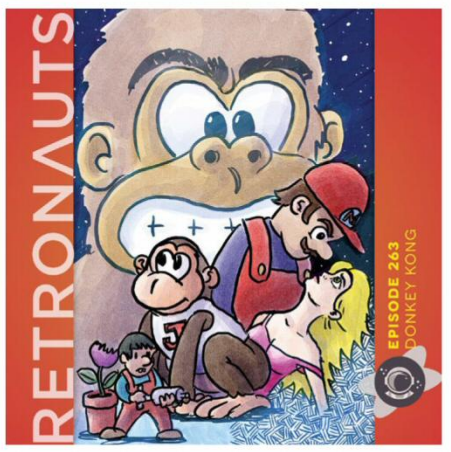
STARTED: 2015

This podcast was started by ex-*Retro Asylum* presenter Paul Monaghan, and now features seven presenters. The show mostly covers games from the 16-bit and 32-bit eras and features in-depth interviews with journalists from classic gaming magazines of the Eighties and Nineties, including Jason Brookes (RIP), Steve Jarratt, Jaz Rignall and Gary Penn.
maximumpowerup.com









recent 200th episode the team was delighted to secure Charlie Brooker – who the hosts later found out was an avid listener to the show. Cohost Ravi Abbott explains that they always try to aim high when it comes to booking guests. "With modern technology like Twitter, you can actually get past agents and get a direct connection," he says. "And you know, everybody's a gamer, so if you say something that sparks a memory of theirs, then they're going to be interested."

Retro Hour continues to aim higher and higher. Their guest wishlist includes names such as Bill Gates and Clive Sinclair, along with Dominik Diamond – someone who Paul has been desperate to interview, too. "There's quite a few of us that would love to have Dominik Diamond on. I've asked, and tried, and gotten nowhere," laments Paul. Ravi admits he has been similarly unsuccessful: "He's doing Canadian radio now, and I don't think he's interested in doing podcasts anymore. But I'd love to hear the *GamesMaster* story, I think that would be great." Even Dan's rogue tactics weren't enough to persuade the double D: "I tried to rile him up by saying, 'Well, you know, we've had Dave [Perry] on, and he's given us his side, isn't it time you gave your side?' But he didn't buy it, unfortunately."

So what's the secret sauce when it comes to creating a retro gaming podcast that people will keep coming back to?

For Jeremy, it's all about the people. "You need to have personalities who are comfortable speaking into a microphone and kind of holding court for a little while. People who have good chemistry with each other. And it's good to have a solid understanding of facts and history. I don't expect anyone out there knows everything about all classic games, but everyone has their specialisation."

Paul agrees that it's important to have hosts and guests with a passion or expertise for the subject they're talking about, and each of the seven rotating hosts on *Maximum Power Up* has their own speciality. "You want to have an expert, ideally, or someone who's really passionate about it," says Paul. "Someone who is quite new to the genre or topic can be quite interesting as well – it's about having a balanced panel."

Everyone also agrees that good editing is essential to any podcast – time spent cutting out dead air and dull segments, as well as adding in music and other sound effects. But it can be an onerous task, explains Dean: "That's the most time-consuming and boring bit of it. Steve, who's been editing most of the shows for about the last six months, he normally spends about a day [per episode] – probably six or seven hours."

Then again, editing podcasts is easier than editing video, says Dan. He started off as a YouTuber before pivoting to podcasts. "The mantra is for every minute of video that you edit, it takes you an hour in the editing suite, which is generally true." But he also thinks that podcasting is great for creating the kind of long-form content you don't often see in videos. "YouTube kind of lends itself more to the 15-minute bitesize format, whereas with a podcast, if you want to listen to an hour-long episode, it's something that you can listen to while you're getting on with something else."

Jeremy adds that it's far easier to feature multiple people on a podcast than it is with video: "It gets awkward and unwieldy if you have a video roundtable with more than two people, it's hard to get all those people in the camera frame all the time and make sure they're not doing something absentminded and awkward, like picking your nose or whatever. You can pick your nose as much as you want on a podcast. The opportunity is there and no one will ever know." *

» Jeremy Parish started *Retronauts* in 2006 when it was part of *1up.com*.

THE RETRO HOUR

STARTED: 2016

The Retro Hour welcomes a different guest from the world of gaming each week, including the likes of Charlie Brooker, Jon Hare, Dave Perry and Eugene Jarvis. The show's hosts come from a background in radio presenting and audio engineering, so as you would expect, the studio-produced show has a high level of polish to it.

theretrohour.com

TEN PENCE ARCADE

STARTED: 2014

This show specialises in covering arcade machines from the Eighties and Nineties, like *Donkey Kong*, *Nemesis*, *Mr Do!*, *Rastan*, *Frogger* and real rarities such as *Heiankyo Alien*. Each podcast features a different arcade cabinet and a high score competition between the presenters, as well as tips on collecting and restoring arcade machines.

tenpencearcade.co.uk

THE UNCONVERTED

Arcade games that never made it home

FLASHGAL

DEVELOPER: **SEGA** YEAR: **1985** GENRE: **BEAT-'EM-UP**

■ Is it Wonder Woman? It it Elektra? No, it's Flashgal! For reasons never adequately explored, she likes to spend her days beating up the henchmen of a rather rotund bald bloke, who definitely isn't the Kingpin, in an autoscrolling brawler that takes a lot of its inspiration from *Kung Fu Master*. Sega's copyright-friendly superhero is as short on powers as she is on backstory – although she can jump quite high, she gets rid of enemies with standard punches and kicks. Flashgal can also get a gun as a power-up, but this hardly counts as a superpower either, unless you're The Punisher or something. Thankfully, her enemies are pretty average, too, ranging from standard henchmen and robotic birds to ninjas, swordsmen and even the odd monkey.

Compared to other single-plane beat-'em-ups of the mid-Eighties, *Flashgal* does have a few things to offer over the competition. It looks pretty nice and sounds fine, and the use of a female protagonist in an action game is always welcome. However, the game's biggest selling point is its variety, which is mostly achieved by sprinkling vehicle levels in with the standard fighting stages. Flashgal can ride a motorbike that launches missiles skywards, take part in a shoot-'em-up stage from a helicopter and even ride a jet ski. She can also use a sword in some of the more standard beat-'em-up stages, which is useful due to its additional reach and its ability to deflect oncoming shurikens.

Given the quality of the game and the company's struggle to attract developers in the home console market, we're surprised that Sega didn't bring *Flashgal* to the Master System. A decent conversion certainly wouldn't be beyond the system's capabilities, and although the game doesn't have an ending (it simply loops after the 11th stage), it wouldn't have taken much to create one. It appears to be a game that Sega has completely forgotten about too, being overshadowed by bigger hits of the era like *Space Harrier*. That's a shame, because while it's a little on the tough side, *Flashgal* is an interesting brawler that deserves a second look.

1UP
13720
HIGH SCORE
50000
■ Flashgal's motorbike can actually jump if needed, which is useful because if it comes into contact with just about anything, it will promptly explode and kill her.
■ The motorbike can only fire directly upwards, which isn't tremendously useful, but Flashgal's other vehicles are capable of firing in different directions and can move differently, too.
POWER
1UP
51740
HIGH
■ Flashgal can take more than one hit from enemies, but there's no precise number for how many – different attacks drain discrete portions of her power bar.
■ Though the lardy boss himself isn't much of a threat, his gun is capable of freezing Flashgal in place, making her easy pickings for his legions of hired goons.
POWER

CONVERTED ALTERNATIVE

MY HERO

1985

■ Another Sega beat-'em-up from the mid-Eighties, and one that did arrive on the Master System. It's considerably simpler than *Flashgal*, with only three repeating stages and no vehicle sections, and it's cut down from the arcade game due to the need to fit in a 32KB ROM, but it's there.

PUZZLE UO POKO

DEVELOPER: **JALECO** YEAR: **1998** GENRE: **PUZZLE**

■ At first glance, *Puzzle Uo Poko* looks like an upside-down version of *Puzzle Bobble*, but there's actually quite a bit more to it than that. The biggest innovation is the way you launch balls into the playfield – by holding down on the joystick, you pull back a virtual plunger akin to pinball or pachinko. The longer you hold it, the further your shot will travel from left to right. As in *Puzzle Bobble*, matching three or more balls will clear them from the screen, and it's possible to cause combos as balls fall into the newly created gap. Occasionally, a submarine will cross the top of the screen. If you can hit this with a ball, it'll fire a beam that clears anything in its path, which is pretty handy. The game is over when balls reach the top of the playfield, which has a rising floor to keep you in check.

Although the unique control scheme can be a bit difficult to get to grips with initially, *Puzzle Uo Poko* is good fun for any fan of puzzle games. We're surprised that Jaleco didn't try to find a home audience for the game, as it would have been an appealing release on either of the 32-bit consoles.

» [Arcade] In early stages, you can see your ball's trajectory as it launches, which helps out a lot.

CONVERTED ALTERNATIVE

PUZZLE BOBBLE 3

1996

■ The inspiration that *Puzzle Uo Poko* takes from Taito's classic series is pretty obvious, and we've gone for the third game due to its addition of more gimmicks like nodes and rainbow bubbles, as Jaleco's game includes plenty of non-standard blocks. Get it for Saturn, PlayStation, N64, Game Boy and PC.

CONVERTED ALTERNATIVE

NBA JAM TOURNAMENT EDITION

1995

■ Midway's slam dunk doesn't have the 3D graphics of Namco's game, but it has all the stuff that made *NBA Jam* fun, plus injuries and substitutions, more secret characters and more modes. It's available on the Mega Drive, SNES, Game Boy, Game Gear, Saturn, PlayStation, 32X and Jaguar.

DUNK MANIA

DEVELOPER: **NAMCO** YEAR: **1995** GENRE: **SPORTS**

■ Hey you! Are you looking for a competent but unspectacular arcade sports game? Then look no further, as Namco's *Dunk Mania* is the game for you! Yes, here's some two-on-two basketball action that's nothing like *NBA Jam*. Well, it's a bit like *NBA Jam* – quite a lot like it, in fact, except it doesn't have the licence so you'll play with fake teams, and there are no fun mechanics like turbo mode or becoming 'on fire', and none of that memorable commentary. In fact, things are so cut back that when you regain possession after being scored against, you start off in the opposing team's half of the court.

What allowed *Dunk Mania* to stand out from the crowd in the mid-Nineties was its use of 3D graphics. These do add a lot to the presentation, as the camera swings around to show off major dunks, and zooms in whenever there's a lot going on at the hoop. Given that it ran on the PlayStation-based System 11 board, Namco's decision to keep it as an arcade exclusive is baffling – with just a little bit of work, it could have been one of the best early sports games on Sony's machine.

» [Arcade] This zooming shot for a dunk is nice, but presentation is most of what distinguishes *Dunk Mania*.

BEST LEFT IN THE ARCADE

TA•O TAIDO

DEVELOPER: **VIDEO SYSTEM** YEAR: **1993** GENRE: **FIGHTING**

■ Here's a game with some weird ideas about how to perform special moves. In this game, you hold down a pair of buttons to charge a move, then release them with the stick held in a specific direction to perform the action. Theoretically, that could be a good way to broaden the appeal of the genre – after all, it lowers the execution barrier inherent in a game like *Street Fighter*. Unfortunately, after a few minutes of practical usage, you'll learn that the main thing this bold and inventive system does is disrupt the flow of fights.

Fortunately, the game exists in a more conventional six-button form, presumably to entice operators looking to refresh their *Street Fighter II* cabinets. Unfortunately, it still features bland backgrounds and equally forgettable music – not to mention the same lame characters, with their stylistically incoherent sprites and stupid-looking special moves, that can only have been designed by someone who knew nothing of martial arts. As a result, you probably still won't want to play it.

STEFANO ARNHOLD

The Brazilian company TecToy has kept the Sega spirit going in Brazil for over 30 years. The current chairman Stefano Arnhold recalls the trials and tribulations of localisation, piracy and keeping hardware alive

Words by Andrew Fisher

"Before I graduated from school I started an internship in a company which was the largest distributor of photographic equipment in Brazil, representing many Japanese brands," says Stefano, who joined the company in 1973 and worked there for many years."From this company I went to work with Sharp, in Brazil, which was a Brazilian company licensed by the Japanese company. Then TecToy started to work with Sega. Probably all my life since 1973, I have [worked and had business] with Japanese companies. I'd say to Nakayama-san of Sega that we were more Japanese than they were!" As we shall see, Stefano's experience with electronics and televisions (especially Brazil's unusual PAL-M format) led him into videogames.

What was your first contact with videogames?
At the time Nintendo had the Game & Watch handhelds, before Mario was even famous. Also the release of the Atari 2600. My first trip to visit Nintendo was in the late Seventies, or the start of 1980. I visited them in Kyoto in order to manufacture their line of Game & Watch in Brazil.

How did you end up at TecToy?
When I was hired by Sharp in 1983, it was partially because of my knowledge on videogames. Sharp wanted to introduce in Brazil the old Atari 2600 and ended up introducing the Intellivision from Mattel. Sharp in Brazil was a huge group with electronics, banking and other activities. I worked for Sharp in the strategic planning department before I was the marketing director, and my boss there in 1987, Daniel Dazcal, he decided that he wanted to go solo, [and] he decided to create TecToy – then he invited me to join him when we started the company from zero.

REPORTAGEM DE CAPA

O TRIUNFO DE UMA

No rastro da febre de videogames, a Tec Toy sai do nada para em

É SÓ ESCOLHER

» Stefano appearing in the November 1992 issue of Brazilian business magazine *Exame*.[Image courtesy of TecToy]

You were there at the start?
I came 15 minutes later… [Daniel] was Sharp's main vice president, and he left in March, April, something like that. It was his birthday in October [when] he told me he would be starting TecToy. When he left I told him, 'I'm going with you,' but he said – 'No, you have to stay, you have to try to do what I failed to do.' So he didn't let me quit first. Only when things were more serious, then he let me quit. TecToy was officially grounded on 18 September, then I joined two months later, when he let me in. [Laughs].

TecToy's first large-scale product was the Zillion laser gun, a toy based on an anime series and licensed from Sega. With the relationship formed, TecToy started manufacturing the Master System in Brazil in 1989. This allowed Sega to bypass Brazil's high taxes on imported goods.

Was there a rival to TecToy in Brazil?
Yes, because Nintendo and Sega were all over the world, right? When we introduced Master System in Brazil we did not compete with Nintendo, we competed with half a dozen or more Nintendo clones. And this was really tough because the companies behind the Nintendo clones were huge. One was the number three largest audio and TV company in Brazil. The other, Gradiente which finally some years later got the licence from Nintendo, was the largest audio company. They were really big, structured companies and we were a tiny little company that was starting up. And our production costs were bigger compared to theirs. First, the Master System was a much more robust product than the Nintendo Entertainment System.

Te
“The Master System was a much more robust product than the NES”
Stefano Arnhold

» [Mega Drive] Battling through the first level of *Duke Nukem 3D*.

> The end consumer knew more about Nintendo and not about Sega
> Stefano Arnhold

Second, when you are producing a legal product you incur royalty payments and other costs the clones did not have. It was not really easy beating them, because the Master System and Sega were not known in Brazil – not that they were absolutely unknown because Sega were very strong in the arcades. Because Brazil is much more closely related to the USA, the end consumer knew more about Nintendo and not about Sega, and zero about Master System. We armed ourselves with doing a lot of things they did not do – a much more complete product. The clones relied basically on piracy and not on their own software. Then we created all the things – like a one-minute ad every day on TV to give hints. We had online, we had a Sega Club. We had a full array of services, because we had the concept we would serve the boy or the girl so they would opt for Sega and not Nintendo. How you say, one place with everything together, right? We only did toys. But we did Sega, so this was, for us, a blessing and why we very quickly got 80% of the 8-bit market in Brazil.

What was involved when it came to localising games into Portuguese?

That's a very interesting question. When we were analysing the market, we saw the RPG games and we did not fully understand how big this market was. I started going a little bit deeper and said, 'Look, let's try it because this looks very promising.' *Phantasy Star* was fully localised in Portuguese for Master System, which was not easy. Portuguese is a language which is differently structured to English and needs a lot more memory. Sentences are bigger, words are bigger, the construction is different. Like, you say one hundred, two hundred, one thousand, two thousand, so you just need one word. We have different names for hundreds and thousands. Today this looks a little bit ridiculous, but at that time memory was very small and they were fully packed; even two or three letters more could make a difference. It took us some time, and people said we were crazy. My boss nearly killed me because I spent much more than I had budget for, and the break even was 10,000 pieces of *Phantasy Star*. He said, 'You'll never sell 10,000.' Then, of course, afterwards we did, and it was a huge success. We had testimony of people telling us *Phantasy Star* was the greatest game they ever played, some they were playing for months. This first success propelled us to start doing other things.

Where did *Mônica* come from?

Comic books! Disney was big normally, but in Brazil Disney was a distant second place and *Mônica* was by far the number one. We moved our headquarters into Sao Paulo, just across the street from *Mônica*'s office. We were growing a lot, and there was no space anymore; I went to visit Mauricio De Souza, the creator of *Mônica* and I saw a big sign, 'FOR RENT'. I called Daniel and said, 'Take note of this number, because I think that's a big place and we could rent it.' Then we were across the street and many times at the end of the day I would cross and meet Mauricio or his staff, and we would reinvent the world, right? To make it better [laughs]. And in one of those thinktank discussions we said, 'Why don't we make a *Mônica* videogame?' They loved the idea, so we wanted to do it simply and quickly to market, so we took *Wonder Boy* [*In Monster Land*] and changed the character. And this was nearly ready to launch when Mauricio called me and said, 'We have to stop the project, we cannot launch it because Mônica is holding a sword and she would never do that. That's not her philosophy, she's nice.' So we had to stop the project but we wanted to do it desperately. We had a meeting with everybody inside TecToy and said, 'How can we save it?' Then one person said, 'Look, she carries a blue rabbit, and with that rabbit she kicks everyone. So why don't we substitute the sword for her blue rabbit?' Looking into the sprites and how to do it

FIVE TO WATCH

Five games from TecToy you must play

STREET FIGHTER II (MASTER SYSTEM)

■ With Stefano's lovely story about impressing the Capcom executive fresh in our minds, we can look at this Master System port with fresh eyes. There are large sprites, decent music, all the fighters are present and correct, and the brawling controls well on a two-button pad. This is highly collectable, especially if you are a *Street Fighter* aficionado.

TURMA DA MÔNICA NA TERRA DOS MONSTROS (MASTER SYSTEM)

■ It's *Wonder Boy III: The Dragon's Trap* with a different protagonist, armed with a rabbit instead of a sword. It may be in Portuguese but the classic gameplay is present – including the hidden secrets and transformations. *Mônica No Castelo Do Dragão* (aka *Wonder Boy In Monster Land*) is also worth playing.

BAKU BAKU ANIMAL (MASTER SYSTEM)

■ Sega's puzzler feels at home on the Master System, complete with cute cutscenes. If you haven't played it before, pairs of symbols drop into the playing area representing food and animals. Animals will eat their food (panda eats bamboo, for example) to clear it, sending extra tiles to your opponent.

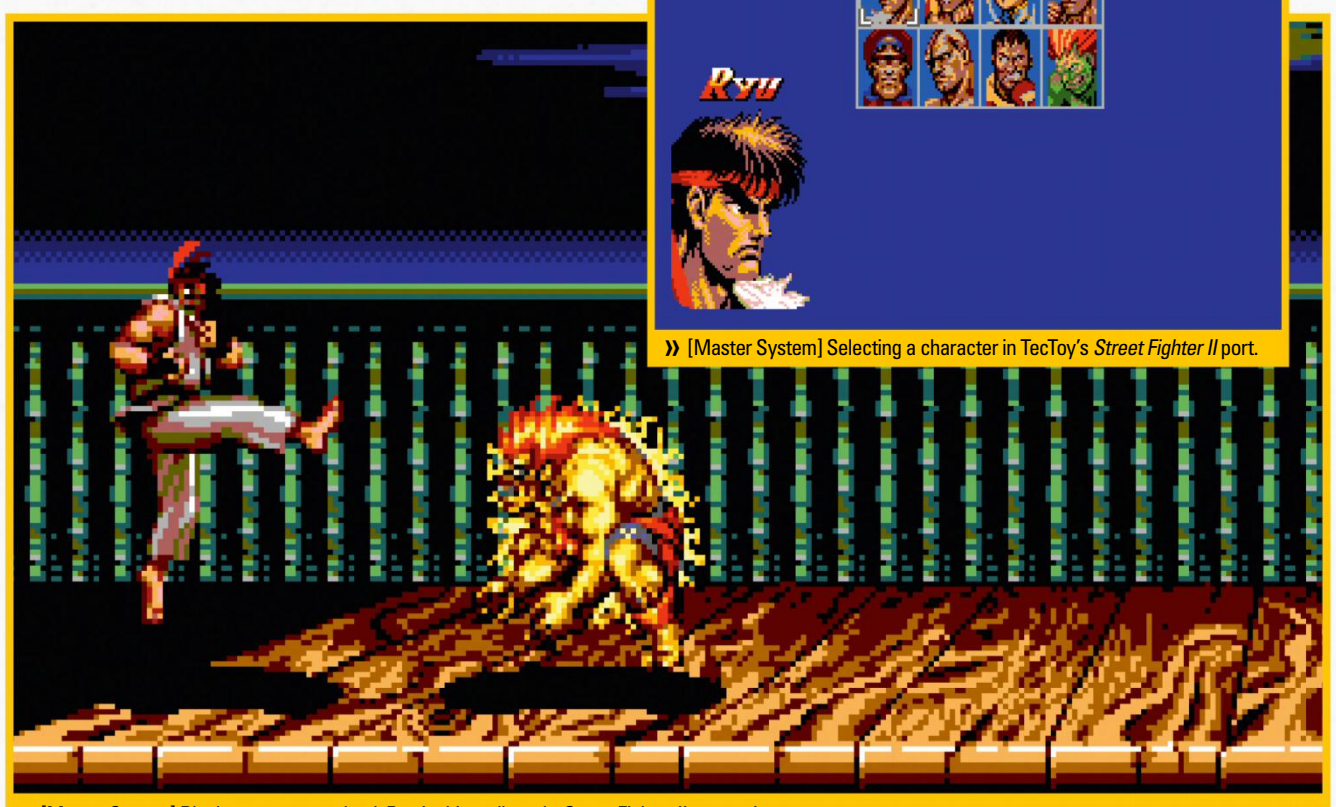
DUKE NUKEM 3D (MEGA DRIVE)

■ 3D Realms did not think a Mega Drive version of its epic first-person shooter was possible, but TecToy managed to achieve it. Alright, when compared to the PC original, the levels are simpler and less populated, and the graphics use an interlaced effect to maintain speed – but it is still fun to chew bubblegum and kick alien ass.

SHOW DE MILHÃO AND SHOW DE MILHÃO 2 (MEGA DRIVE)

■ It may seem odd to recommend a quiz game in another language, but this is still eminently playable as you guess the answers. What this entry celebrates is TecToy's achievement of bringing new Mega Drive games out in the Noughties, and its ambitious plans for an interactive TV show.

» [Master System] Selecting a character in TecToy's *Street Fighter II* port.



» [Master System] Blanka prepares to shock Ryu in this well-made *Street Fighter II* conversion.

with the technology of that time, it looked possible so I called Mauricio and said, 'We're launching the game.' And he said, 'No, no, you can't,' and I said, 'You're going to love the solution, we used Samson (the rabbit),' and he immediately said, 'Yeah, let's do it.' That's how we finally got to market.

Was it difficult porting Game Gear games to the Master System?

That was not easy, because the Game Gear had 4,096 colours, and we had 256 with the Master System. So the colouring part we needed to do by hand. The engineers told us, 'no way', but then we hired some really patient people – I think we should have built some statues for them – because they manually (re)coloured everything, it was an amazing job they did. One of the first ones was *Little Mermaid*, and [there were] so many colours below the sea but we managed it. A 'Hercules' task.

How did you manage to port *Street Fighter II* to the Master System?

We needed, of course, the approval from Capcom, and we took advantage of the visit of a Capcom guy to Brazil. He was not related to arcades, but he had a high position. We said, 'How are we going to explain Master System?' And then we had an idea. We have the TV and we hide the console, and we put the Mega Drive joypad in his hands. He was playing on it and said, 'It looks very simple for a 16-bit game.' And we said, 'You are 100% right, it's very simple for a 16-bit game – but it's an 8-bit game, not 16-bit game,' and then we showed the Master System console hidden behind the TV, and he said, 'That's not possible, you cannot have 8-bit with such big sprites.' That brought him on board.

How did you end up creating versions of *Carmen Sandiego*?

We really wanted to get deep into the 'edutainment' area, which was hard to be creative in, and we saw that *Carmen Sandiego* would be perfect. We wanted to do *Carmen Sandiego* in all platforms – PC, 16-bit, 8-bit, Game Gear – and we approached Brøderbund, the creator. They said there was no 8-bit licensed product and it could not be done. I was really lucky because on one of my trips to the US, I bought everything I could in Toys 'R' Us – and I remembered I had bought the Parker Bros. 8-bit *Where In The World Is Carmen Sandiego?*. I could not find the cartridge, but I found the instruction manual. Then I remembered that Parker Bros was bought by Tonka, and Tonka was bought by Hasbro. I remembered that one very old director, very nice guy, from Hasbro – he came from Parker Bros. I called him and said, 'Do you remember?' And he said, 'Of course I remember, I licensed it and I was there. I did it.' [I said], 'Okay, so now I have to ask your help because now we have to convince the Brøderbund people, because they don't believe.' And then he wrote a fax. I showed the Brøderbund people his fax, gave them his telephone number and showed them the instruction manual. And I convinced them that I could have the licence. When we sent the product for final approval, they approved the PC and Mega Drive versions, and there was no way to get approval for the Master System. I took a plane; I went to Sausalito, the other side of the Golden Gate Bridge. I went to them and said, 'I have a huge programme on TV to launch it, what's happening?' And the lady said, 'Yeah, we were a little bit embarrassed we don't have a Master System, we don't know how to test it.' Then I said, 'I can send you one immediately.' She said, 'You took a plane to come here, I'll give you the approval.' It was the first time in Brazil that you have an edutainment product on prime-time TV advertising, on all platforms – and it was a huge failure. We made ridiculous quantities and my boss nearly killed me again. Afterwards things started to pick up, but this huge investment was a big failure.

What was involved in creating your *Woody Woodpecker* (*Pica-Pau*) game?

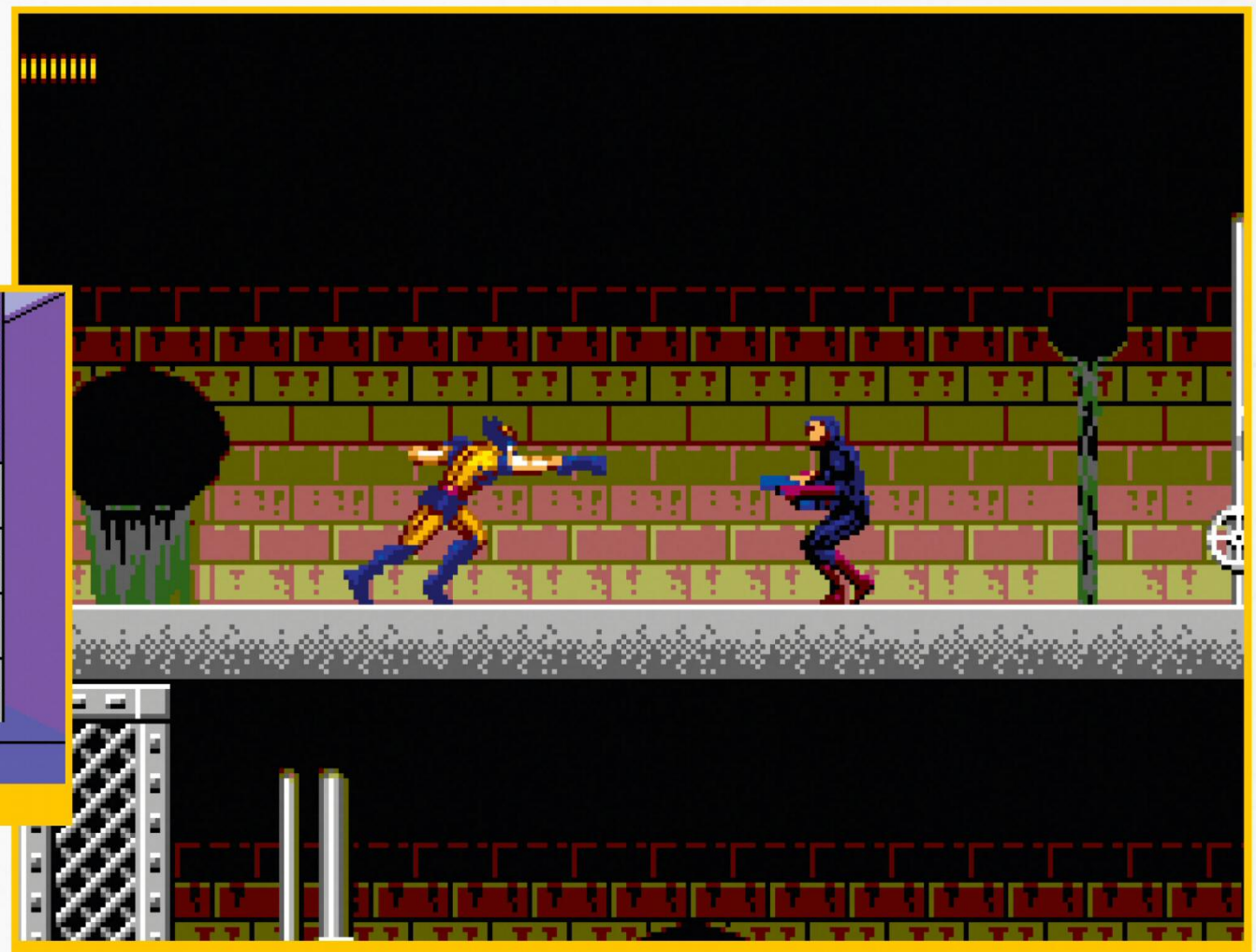
Our development studio was basically converting anything to have more games. Then we said, 'Why don't we make one full original product?' So we made research on the characters on TV, who were most popular in Latin America. And we

SELECTED TIMELINE

GAMES

- **MÔNICA NO CASTELO DO DRAGÃO** [1991] MASTER SYSTEM (ADDITIONAL DEVELOPMENT)
- **PHANTASY STAR** [1991] MASTER SYSTEM (LOCALISATION)
- **SONIC THE HEDGEHOG 2** [1992] MASTER SYSTEM (PORT)
- **DISNEY'S ARIEL THE LITTLE MERMAID** [1993] MASTER SYSTEM (PORT)
- **STREET FIGHTER II: CHAMPION EDITION** [1993] MASTER SYSTEM (PORT)
- **CHAPOLIM X DRÁCULA: UM DUELO ASSUSTADOR** [1994] MASTER SYSTEM (ADDITIONAL DEVELOPMENT)
- **ECCO: THE TIDES OF TIME** [1994] SEGA CD, MASTER SYSTEM (LOCALISATION, PORT)
- **FIFA INTERNATIONAL SOCCER** [1994] MEGA DRIVE, SEGA CD, MASTER SYSTEM (LOCALISATION, PORT)
- **TURMA DA MÔNICA NA TERRA DOS MONSTROS** [1994] MEGA DRIVE (ADDITIONAL DEVELOPMENT)
- **WHERE IN THE WORLD IS CARMEN SANDIEGO?** [1994] MEGA DRIVE, MASTER SYSTEM (LOCALISATION)
- **20 EM 1** [1995] MASTER SYSTEM
- **SAPO XULÉ: O MESTRE DO KUNG FU** [1995] MASTER SYSTEM (ADDITIONAL DEVELOPMENT)
- **WHERE IN TIME IS CARMEN SANDIEGO** [1995] MEGA DRIVE (LOCALISATION)
- **FÉRIAS FRUSTRADAS DO PICA-PAU** [1996] MASTER SYSTEM, MEGA DRIVE (DEVELOPED)
- **GAME BOX SÉRIE ESPORTES RADICAIS** [1996] MASTER SYSTEM (ADDITIONAL DEVELOPMENT)
- **PHANTASY STAR II** [1996] MEGA DRIVE (LOCALISATION)
- **CASTELO RÁ-TIM-BUM** [1997] MASTER SYSTEM (DEVELOPED)
- **SHINING IN THE DARKNESS** [1997] MEGA DRIVE (LOCALISED)
- **SONIC BLAST** [1997] MASTER SYSTEM (PORT)
- **VIRTUA FIGHTER ANIMATION** [1997] MASTER SYSTEM (PORT)
- **X-MEN: MOJO WORLD** [1997] MASTER SYSTEM (PORT)
- **BAKU BAKU ANIMAL** [1998] MASTER SYSTEM (PORT)
- **DUKE NUKEM 3D** [1998] MEGA DRIVE (PORT)
- **LEGEND OF ILLUSION STARRING MICKEY MOUSE** [1998] MASTER SYSTEM (PORT)
- **MICKEY'S ULTIMATE CHALLENGE** [1998] MASTER SYSTEM (PORT)
- **PHANTASY STAR III: GENERATIONS OF DOOM** [1998] MEGA DRIVE (LOCALISATION)
- **RIVEN: THE SEQUEL TO MYST** [1998] WINDOWS (LOCALISATION)
- **SÍTIO DO PICAPAU AMARELO** [1998] MASTER SYSTEM (DEVELOPED)
- **YU YU HAKUSHO: MAKYO TOITSUSEN** [1999] MEGA DRIVE (LOCALISATION)
- **SHOW DO MILHÃO** [2001] MEGA DRIVE (DEVELOPED)
- **SHOW DO MILHÃO VOLUME 2** [2001] MEGA DRIVE (DEVELOPED)
- **RAGNARÖK ONLINE** [2005] WINDOWS (LOCALISATION)
- **MASTER SYSTEM 3 COLLECTION** [2006]
- **MASTER SYSTEM 3** [2008]
- **MEGA DRIVE PORTABLE** [2008]
- **MASTER SYSTEM EVOLUTION** [2011]
- **MEGA DRIVE 4 GUITAR IDOL** [2009]
- **MEGA DRIVE** [2017]
- **ATARI FLASHBACK 9 GOLD** [2017]
- **ATARI PORTABLE FLASHBACK** [2017]

» [Master System] All of *Phantasy Star*'s text had to be rewritten in Portuguese.



» [Master System] The first level of Marvel tie-in *X-Men: Mojo World* features the adamantium claws of Wolverine.

found that Woody Woodpecker was the oldest, the cheapest, and the character that had the largest library [of episodes]. We approached the owners, Universal Studios, proposed to them the project and they loved it. We started doing the game, and distributed it in all Latin America.

> "In Brazil, we kept 8-bit when we launched 16-bit, we kept 8-bit and 16-bit when we launched 32-bit, and so on"
> Stefano Arnhold

Where did the *Show De Milhão* games come from, and why launch new 16-bit games in the Noughties?

If you look to other places in the world, they killed the old platform when a new one was launched. In Brazil, we kept 8-bit when we launched 16-bit, we kept 8-bit and 16-bit when we launched 32-bit, and so on. In the Noughties, to have new 16-bit titles was a challenge. *Show De Milhão*, this show was *Who Wants To Be A Millionaire?* – really popular in Brazil. The project was much more ambitious, using our MegaNet technology, we proposed to the TV network an interactive *Who Wants To Be A Millionaire?* – the people in their homes would be able to play together, through the Mega Drive. They loved the idea because 'interactive TV' was the most important saying, and there were suggestions the audience would grow 23% if it was interactive. To make a long story short, we have never managed to launch it, because the TV company didn't want to do all that was necessary. But we licensed the product and launched a new Mega Drive game, and it was a big success.

What made TecToy start making new versions of old consoles?

The strategy was to keep the legacy platforms alive. We said, 'What do we do to maintain the Master System? Let's do a portable unit.' This would be cool, you know, a portable unit with RF [transmission]. We tested it on batteries and it worked really nice, and we sold half a million of those in some years. We are always inventing new things; it's not easy because we are running out of ideas.

Do you think it's good for 'mini' consoles to have built-in games?

It was a must because piracy in Brazil was huge, and at one moment we were practically not selling legal software anymore. Built-in was an excellent solution because it added value, it helped the sales a lot, it prevented the offer of pirate software; because at one time we even closed the cartridge slot, in order to prevent people using pirate products. Younger audiences wanted less complicated games, and the parents when they saw that they had a full library of, let's say, 100 games built-in it were assured that they did not need to buy more.

Why release the Mega Drive 2017?

We wanted to celebrate 30 years of partnership with Sega. There are not many videogame companies in the world with such a long-lasting relationship. We made a poll, we asked what should we do – Master System or Mega Drive? We were sure people

TECTOY AND ZEEBO

Stefano walks us through his all-digital console concept

"The original idea is brilliant, the potential market is brilliant, the solution with Qualcomm [anti-piracy] technology is brilliant," says Stefano about Zeebo – a download-only console aimed at developing markets, with exclusive games from big names including Capcom (*Resident Evil*), Namco and EA (*FIFA*). "We patented it in Brazil before we approached Qualcomm, there are not many Brazilian patents on consumer electronic goods, and we were quite proud of having a worldwide patent in this area." The 3G-enabled Zeebo, also offering internet access, launched in Brazil and Mexico in 2009 with high hopes, but closed down in 2011. Stefano concludes, "What went wrong is that the chips we were using at the time could not perform what we wanted, and the porting of the games was a massive undertaking. It was easier to write games from scratch; games that we wrote here in Brazil from scratch were the ones that sold better. So it was too early, probably... We saw that you need a lot of money. But it turned out you need a hundred times a lot of money. We wanted to develop a platform for 800 million households, and [Qualcomm] wanted to develop a product."

» TecToy's advertisement for Zeebo's launch, showing the six-button pad and Boomerang motion controller.

» [Master System] Knuckles takes on Eggman in this boss battle from *Sonic Blast*, ported from the Game Gear.

» [Master System] Accusing a suspect from a phone box in *Where In The World Is Carmen Sandiego?*.

would say original Master System, which was much easier for us. To our surprise, most people wanted Mega Drive. The winning concept was that we should do it as identical as possible to our first product, with *Altered Beast* and the same packaging, even with the audio volume control, you know? The thing which nobody uses, right? So we decided to celebrate with Mega Drive, to fulfil the wishes of the audience. It was not easy because the sound processors, which were tailor-made by Yamaha, did not exist anymore. It took us a lot of time to perfect it, and the sound came out pretty well considering the difficulties. Finally, the product came out and it was very similar to the original.

Were the working cartridge slot and SD slot important?
Very important, because we wanted to build in games and it was easier to put it on the SD card. It was also cheaper than the original memory. People could use other games that they already owned. During development, we asked the people what they wanted. This relationship with the community was very special, their feedback was really good.

How successful were the re-released Mega Drive cartridges?
They were modestly successful, in numbers sold. But they were a huge celebration, you know? We were getting messages every day to launch basically all the cartridges again [laughs]. In 2016 when we were working on the project, to get the licences was really tricky. *Mônica* was still possible, because we know Mauricio very well and he knows us. At that time it was his grandson taking care of technological products, and he confessed to us when he was small, he was playing Master System hidden from his mother. And his mother is Mônica, that's where the name comes from, so this was not so difficult to get the licence. And she heard that her son was playing Master System hidden, and she didn't know this before that meeting. When we wanted to do an Ayrton Senna game it was possible, Senna's likeness of course, but it was not possible to get the licences for the tracks from *Super Monaco GP*. There were many titles that we sought to re-launch and failed… Sometimes it was a single music, some small licensing detail. One thing TecToy has, and will always have, is huge respect to the copyrights of other people. Even though people ask, 'It was so many years ago, just do it." And I would say, 'No, give me a letter or agreement else I won't do it.'

Did you realise TecToy had fans overseas?
Yes, I get lots of enquiries from retro game magazines for interviews for some years. Fans wanted to buy the 2017 Mega Drive but we did not have the rights to sell it in Great Britain, for example. So I had to convince Sega to allow me to send units to some persons privately.

Have you been to many retro gaming events?
At the first big Comic Con in Brazil, they asked me to do a presentation. I was walking through the event, and someone stopped me and said, 'You are Stefano from TecToy,' and I said, 'How did you recognise me?' And they said they know me. And then another person, and another… which was a big surprise. After we launched our 30-year celebration, I started to do gigs in libraries and bookstores. Some meetings went on until midnight – [that was] when I was training for marathons and skiing I do my training at 6am. I had to autograph original cartridges and packages, and it was very interesting to see all the people telling their stories. There was a couple who told us they got married after knowing each other through Master System.

Do you miss the founder of TecToy, the late Daniel Dazcal?
Yeah, too much. He passed away when he was only 43 years old, and he was my boss, my big friend. So yes, that's tough.

Is videogaming still important to TecToy as it expands?
Yes, I believe it always will be the heart of the company. We will still keep Master System… now we are in 2019 and we introduced it in November 1989, so for 30 years we are producing the same product. And writing royalty cheques to Sega for 30 years [laughs]. Brazil is starting to come out of this recession, so probably now is the time to start looking into new projects.

Obrigado!
You're most welcome.

Thanks to Stefano, his assistant Cristina Fabrini, photographer Pedro Cavazzoni, and Joerg Droege (sceneworld.org) for their help. ✱

YOU ASK THE QUESTIONS

Visit www.retrogamer.net/forum to join in

NICK THORPE: Did you have local programmers in Brazil or were the ports done elsewhere?

We had a full dev studio, really specialised in porting games. We developed tools to do things that at the beginning were done by hand, by people that had the patience to do it pixel by pixel. After some years we had tools to convert from 16-bit to 8-bit, Mega Drive to Master System, Pico to Mega Drive and others. If you go to a normal studio you are going to see some skills, and in our studio you will see completely different skills. We are quite proud of things we did, in bringing *Street Fighter II* to Master System, the 3D Realms game *Duke Nukem* [to Mega Drive]. It was very difficult to do this first-person view on Mega Drive, there was one guy who worked with the *Phantasy Star* project, […] and he solved the problem, we were quite proud of the solutions we developed here in Brazil.

MR JENZIE: When doing the porting, did you try and make the games better?

99.9% of the time it was a localisation or port, because of the agreements. If you port a Pico product into a Mega Drive, or Game Gear into Master System, you cannot say that this is a straight port. I would say the enhancements happened there, the tools we created and the speed we did it – at some moments the market was not so big for the title and you have to be careful of the investment you would do to make the port. It was only possible because we were making it less expensive and more automated.

RETROBOB: How did you keep the Master System alive for so long?

If you are a young kid or maybe in a lower income class that's a perfect product; you have a full library, there are excellent games and they are easier to play. You are not going to buy your son or nephew or grandchild a PlayStation – it's too complicated for most three or four-year-olds to master. But *Alex Kidd* is perfect, right? So we are supplying a real market and people love us, and I hope that in 30 years' time we are still doing it!

POSITION
10/12
LAP RECORD
9'59"765
TOTAL TIME
0'17"368
10

Ridge Racer

THOU SHALT NOT COVET THY NEIGHBOUR'S HANDHELD

» PSP » 2004 » NAMCO

Recently, it occurred to me that the way we anticipate consoles has changed, because we get them within days of release now. It used to be so different – the machine would come out in Japan, and you'd get incredibly excited about screenshots of even the most impenetrable historical war sim. Then the American system would come out, with games you could actually read, and if you had the money you'd probably import it. Finally, the rest of us would get it many months later, and in the really bad old days, we'd get crummy PAL conversions with it. So I got to thinking, when was the last time I went through those painful months of waiting? Looking at it, the PSP was the last system with a truly agonising European delay. Japanese players got their consoles in December 2004 and Americans had to wait until March 2005, but we didn't get it until September 2005.

I still vividly remember my first encounter with the PSP. HMV was offering a 'first look' at the system months in advance, which in practice meant one member of staff bringing a system out to the shop floor. He showed me *Ridge Racer*, and although I was a bit more excited about *WipEout Pure*, I'm pretty sure that was the best choice possible. It didn't matter that it just contained old tracks – the screen really was as good as people were saying, and the game was running at a silky smooth 60 frames per second! After all of about 30 seconds, Namco had convinced me that the PSP was every bit as good as I had hoped, and I hadn't even played it yet. So I asked the member of staff if I could do so. No deal, though to be fair the poor guy was probably scared I'd do a runner with it, as I suspect he'd bought his own import system and was coerced into bringing it into work. I immediately knew I needed it, and if I'd had the money I'd have bought one from America that night – which probably wasn't what HMV intended. ✱

>> It's that awkward time of the year when there are very few games out. Having said that, we've still found some beauties, including the rather excellent physical release of Shovel Knight and the fun Demon's Tilt

» [Switch] *King Of Cards* introduces Joustus, an excellent new card game.

Shovel Knight: Treasure Trove

THIS RETRO-INSPIRED COMPENDIUM DELIVERS GREATNESS IN SPADES

INFORMATION

- **SYSTEMS:** PC, PS4, SWITCH (TESTED), XBOX ONE
- **PRICE:** £34.99
- **PUBLISHER:** YACHT CLUB GAMES
- **DEVELOPER:** YACHT CLUB GAMES
- **PLAYERS:** 1-4

No, this is not the world's most belated review of *Shovel Knight*. In fact, these very pages have already covered the original multiple times since it came out a little over five years ago (spoiler alert: it's excellent), but with the celebrated platformer getting this long-awaited physical release – and with several wheelbarrows full of extra content, no less – it just felt right to grab our tools once more and dig into what the full package offers.

Treasure Trove is a heck of a lot more game than you might expect. For one thing, *Shovel Knight* – you know, the game in the title – now makes up way less than a quarter of what is on offer. The base offering, *Shovel Of Hope*, should need little introduction at this point, but the rest could probably do with a little unearthing in case you missed them. *Plague Of Shadows* is a side story comparable in length to the original but with an alchemical twist, while *Specter Of Torment* is an equally chunky prequel campaign that puts Specter Knight front and centre for more of a fast-flowing, hack-and-slash type of adventure.

Next up are the two most recent additions to the package, so let's dig a little deeper into those. *King Of Cards* follows much the same structure as those previous additional campaigns to tell the rags-to-riches story of King Knight, although with one significant difference – it's also a card game. Yes, you read that right, but we'll unearth that in detail shortly. Much of the game still comprises the same kind of side-scrolling action stages, albeit with the nuances of King Knight's surprisingly deep abilities. Aside from the stack of extra skills unlocked over the course of the game, His Highness manages to do a lot with just two buttons. His basic dash attack, for instance, can be converted into a damaging roll with another button tap or become an airborne spin on hit, and this dash can be used again after landing on an enemy or object to keep the combo going.

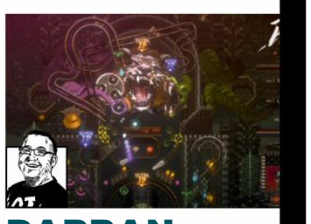
Learning exactly how that works might take a little while, but so will mastering the card-based fun of Joustus. This unique card game is

» [Switch] Scoring a Gem Sweep in Joustus allows you to steal opponent's cards up to the number of gems claimed, which can be a huge bonus.

BRIEF HISTORY

» Yacht Club Games sent *Shovel Knight* on its maiden voyage in 2014, and fans were quick to warm to its tight gameplay, fantastic soundtrack and surprisingly authentic retro stylings. This catch-all collection serves as both evidence and celebration of the studio's outstanding talent, so you're sure to dig it.

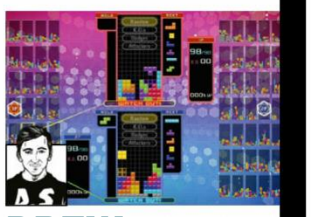
✱ PICKS OF THE MONTH



DARRAN

Demon's Tilt

I have had an absurd amount of fun with this over the Christmas break. It's a fitting tribute to the brilliant *Devil Crash*.



DREW

Tetris 99

I've jumped back into this battle royale sleeper hit. Whenever I get a surprise salvo of junk come my way I'm convinced it's Nick…

» [Switch] Challenge runs for each of the four main campaigns let you put your skills to the test, but don't expect an easy ride...

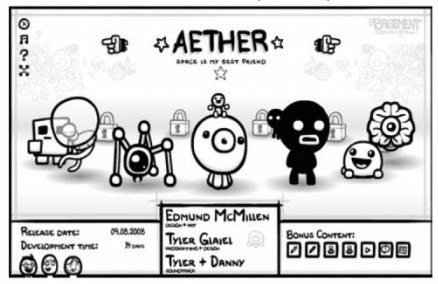
WHY NOT TRY

▼ SOMETHING OLD

SUPER MARIO ALL-STARS (SNES)

▼ SOMETHING NEW

THE BASEMENT COLLECTION (VARIOUS)



all about board control, with the goal of securing more gems than your opponent to win. Gems vary in number just as boards vary in size and shape, with each card having arrows that point in various cardinal directions that are used to shove other cards around the board, assuming their own arrows don't counteract your own. You can't place a card directly onto a gem, so you'll need to come up with strategic ways to nudge your own cards onto those winning spaces while bumping your opponent's cards out of the way. As the game goes on, new rules are gradually introduced – double arrows that can beat singles, for instance, or effects that destroy other cards, convert them to your side, or blast them back. The drip-feed nature of these extra rules makes the game easy to pick up, but means that battles quickly escalate from being four-tile whitewashes to epic mental showdowns fought across several fronts. The stakes are high, too, since the winner can steal a card from the loser. To help shake any potential Triple Triad nightmares, cards lost in this way can be bought back from an NPC, and you can even pick up extra prizes if you manage to pull off a clean sweep of all the gems against an AI rival.

King Of Cards has a neat consistency in that both its protagonist and its minigame share the same kind of seemingly simple basics while having a lot more going on beneath the surface. It's by far the most interesting and varied of the four main campaigns on offer here, although the intense logic puzzles presented by Joustus may not be for everyone. But if you'd rather get your hands dirty than play some cards, then *Treasure Trove* has you covered.

Showdown is the final new addition to the *Shovel Knight* family, and it's basically a pretty darn good *Super Smash Bros* tribute act. On top of the four playable Knights from their respective campaigns, you also get to pick from the rest of the costars (and more, as you unlock them all) and dive into arena battles across a number of different stages and rule sets. Some feel almost like a 2D *Power Stone* – albeit without the character transformations – while others are either more combat-centric or objective based. It's a really cool (and surprisingly full-featured) addition, especially if you're planning to play with other *Shovel Knight* fans. Otherwise, the universal appeal of *Smash*'s insane roster or the glorious simplicity of *TowerFall* may serve you better for keeping a crowd busy.

So, you've got basically four full-length games, as well as a remarkably well-fleshed-out multiplayer component, and a ton of additional content on top of all that, too. It's kind of ridiculous both that all of this comes in one package and that existing owners of the base game got all this extra stuff for free as updates, although it still represents incredible value for money now as well. If all that sounds good… well, that's because it is. *Shovel Knight*'s final form is majestic and represents a deserving part of any collection. ✱

» [Switch] The new campaign pits you against rivals both old and new, and none will pull any punches.

» [Switch] Each game is packed with secrets and extras – can you dig deep enough to find them all?

In a nutshell

Riffing on the past while introducing modern elements to superb effect, *Shovel Knight* and his entourage of spin-offs put on an astounding show and this stacked package is simply one of the best out there right now.

>> Score **92%**

PICK OF THE MONTH

Demon's Tilt

» **System:** Switch (tested) PC, PS4, Xbox One
» **Buy it from:** Online, retail » **Buy it for:** £11.39 (Steam) to £17.99 (Switch)

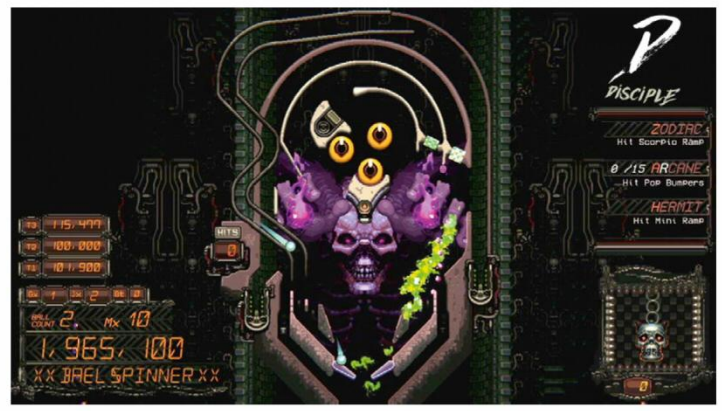
Ever since we first interviewed Adam Ferrando about his new pinball game, he made it perfectly clear that his new game was heavily indebted to Compile's excellent pinball hit, *Devil Crash*, from its creepy aesthetics to its exhilarating soundtrack. We've now been playing the game extensively over the Christmas break and it's clear to see that it not only pays excellent homage to that earlier gem, but also brings a few of its own ideas to the (pinball) table as well.

Structurally it's very similar to *Devil Crash*, boasting a familiar occult theme with a table that extends across three screens (which looks particularly impressive when played vertically). Each area has interesting items to interact with as well, from a woman that undergoes a demonic transformation the more times she's hit, to a large muzzled lion at the table's zenith. The upper sections feature complicated ramps, too, which will take a while to fully master.

What sets *Demon's Tilt* apart from similar games is that many enemies and structures on the table will spit out bullets when hit, which will then interact with your ball, changing its direction and slowing it. Initially, it feels obtrusive, but you soon realise that it's a great way of managing the pace of the table and, more importantly, will score you a lot of points. And point scoring is where it's at in *Demon's Tilt*, with the game wanting you to string together shmup-like chains that will grant you impossibly high scores as you learn the intricacies of the table and start realising where the jackpots and sweet spots are.

While Normal mode is a good place to learn the scoring mechanics of *Demon's Tilt* you'll really want to move over to EX mode as it not only offers a stiffer challenge, but also introduces some smaller, highly enjoyable tables, just like the game it's lovingly paying tribute to. The Switch already has plenty of great pinball games and *Demon's Tilt* stands proudly with them, the only thing that holds it back is a lack of suitable button configurations for playing on a Switch Lite (something many Switch shoot-'em-ups suffer from). Other than that, though, it's an essential addition to your library.

>> Score **88%**



»[Switch] They can be tricky to unlock, but the tables in EX mode are always worth reaching.

»[Switch] This serene looking lady will be instantly familiar to anyone that's enjoyed *Devil Crash*.

Iro Hero

» **System:** PS4 (tested), Switch, Steam
» **Buy it from:** Online » **Buy it for:** £4.99

If you're going to imitate a shmup, *Ikaruga* is a good one to choose, and that's exactly what Artax Games has done here – red shots destroy blue ships, and vice versa. While it doesn't have the same audiovisual impact as Treasure's classic, as the pixel art is a little bland and the music is forgettable, *Iro Hero* does bring worthwhile new ideas to the table. Levels include deflection barriers that send your shots around corners, purple zones that flip the polarity of your shots as they pass through, and more. Unfortunately the difficulty curve is a little uneven with some noticeable spikes, and the trophies are far too easy to earn. Still, shooter enthusiasts will get some fun out of it, especially at such a low price.

>> Score **77%**

Japanese Video Game Obscurities

» **Buy it from:** amazon.co.uk
» **Buy it for:** £24.99, £13.00 (Kindle)

Kurt Kalata certainly knows a thing or two about obscure videogames and has been involved with a number of popular websites, including *Castlevania Dungeon* and *Hardcore Gaming 101*. Kurt's latest book is heavily inspired by that second website and features 101 import games that range from familiar import titles like *Princess Crown* and *Metal Wolf Chaos*, to curios such as *Maka Maka* and *Jesus*. While it lacks developer insight and feels a little templated in its approach, there's no denying Kalata's knowledge of the subject matter, which is split across seven core genres and a miscellaneous section. The end result is an enjoyable, fascinating read, especially if you've liked this month's import feature.

Sega Ages: Columns II

» **System:** Switch » **Buy it from:** Online
» **Buy it for:** £5.99

This sequel offers a few variations on the classic puzzle game, some of which will be familiar to players of the 8-bit versions. Versus Columns is a competitive mode for two players, and Flash Columns tasks players with eliminating a number of flashing blocks while avoiding skulls – a tough task, which is why the stage select and Skull Smash modes have been added. The new Infinite Jewels mode is a fun hybrid of Flash and regular *Columns* where the flashing blocks eliminate all blocks of the same colour, and the original *Columns* is included for purists. Online modes plus the usual high-quality *Sega Ages* presentation options round out a solid package.

>> Score **80%**

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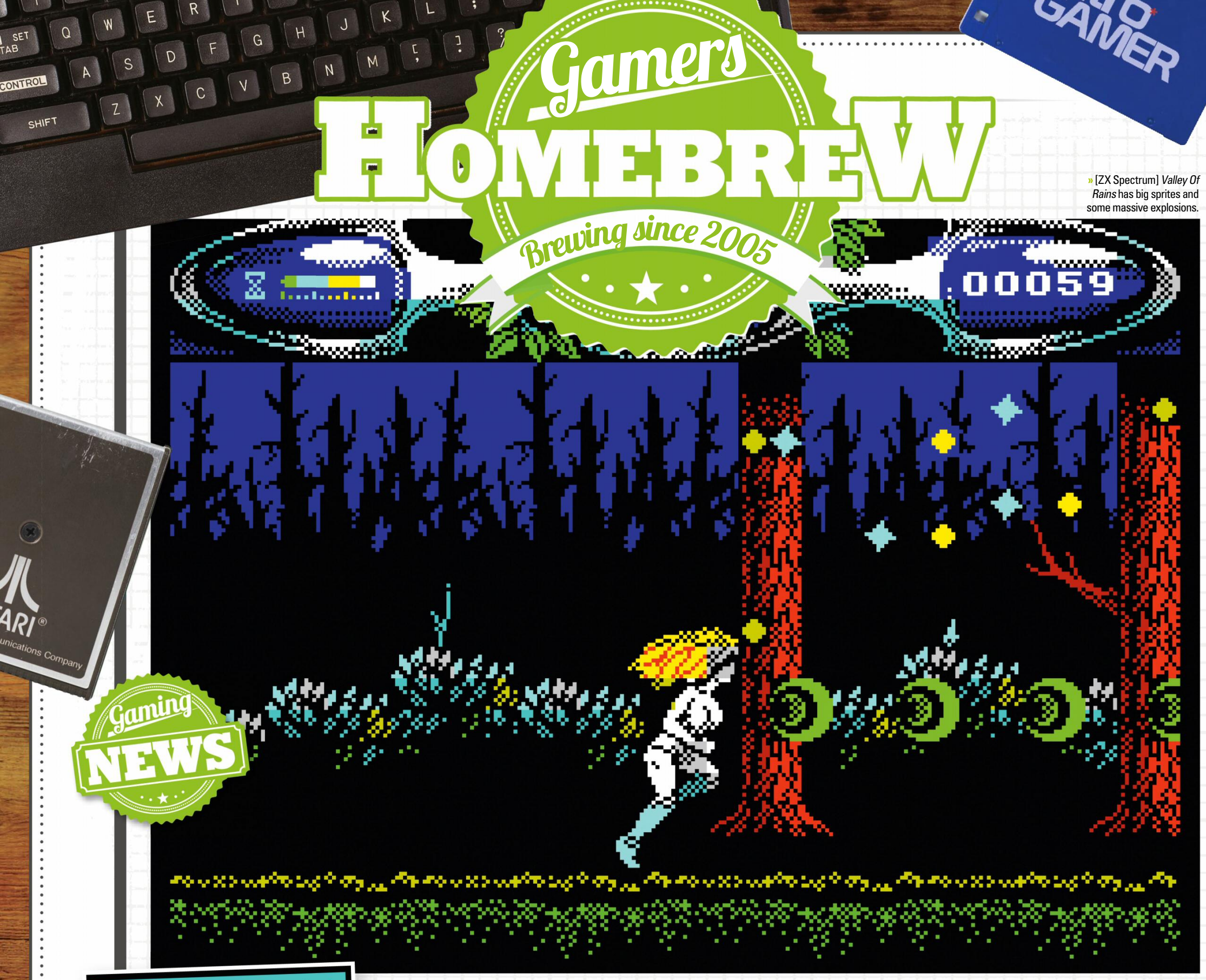


» [ZX Spectrum] *Valley Of Rains* has big sprites and some massive explosions.

Gaming NEWS

FROM RUSSIA WITH LOVE

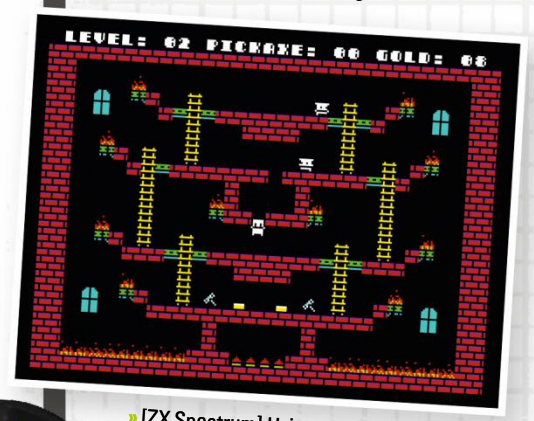
There's been quite a bit of activity from the Yandex Retro Games Battle 2019 recently. Despite the Yandex Museum being the host, it covers a wide range of platforms, and this competition was concentrating specifically on the Spectrum and received a whopping 19 entries in total which covered a wide range of genres and topics.

Arcade-style racers aren't common in homebrew circles, but this event has a couple to choose from. *Drift!* is similar to the skid-themed racing events in games like *Need For Speed: Underground* where the player keeps within the confines of a relatively short track while causing their car to drift as much as possible. Staying with racing but taking inspiration from motorcycle-based arcade titles such as *Hang On*, *Just A Gal* sees motorcyclist Maureen Miles taking on the primarily male-dominated world series of circuit racing, working her way through the ranks during 24 stages to take on the best riders on the planet during the final.

Another game with a female protagonist is *Valley Of Rains*, a scrolling run-and-gun affair that has large player and enemy objects which appear to be taking a few cues from classic titles, such as the first stage of *Savage* – right down to some very extravagant explosions when nasties are blasted. Switching to platforming action, there's *Robo-stalker* which sees the player exploring a drone-filled complex and trying to escape while destroying the heavily armed droids and fixed gun platforms in their way. We also have some more colourful and cute flip-screen action from both *RoboBro Episode 1* and *Space Monsters Meet The Hardy*, with the latter in particular being very strict on the time limits which in turn leads to some seriously high-speed gameplay.

There's plenty more where those come from, including a text adventure called *Little Mouse Adventure* – which, despite some of the titles being in Russian, is conveniently in English – plenty of dashing between boulders in *Automated Cave Explorer,* or some no-nonsense blasting with *Interceptor 2020*. Everything can be downloaded from the competition's official website at Kikstart.me.uk/yandex-2019 and developer Retro Souls has also been busily porting its entry *Yazzie* – a more puzzle-oriented platformer starring a careless seeker of riches who finds himself in a trap-filled mansion – over to the MSX, which should be available to download and play from its website RetroSouls.net by the time this issue is out.

» [ZX Spectrum] Trying to get the hang of cornering in *Just A Gal*.



» [ZX Spectrum] Using a pickaxe in *Yazzie*, which will soon be on the MSX as well.

NEW GAMES NEEDED

If you have a homebrew project you would like to see featured then please contact us at: **retrogamer@futurenet.com**

HOMEBREW HEROES

Developer Antonio Savona has been busy producing C64 ports of Activision classics Chopper Command, Keystone Kapers and Frostbite. That's a lot of work, so we stopped him for a chat – in part to give the poor man a rest!

THE BIG INTERVIEW

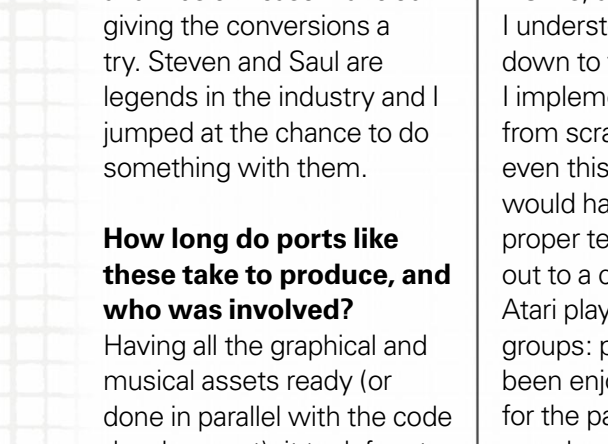
What drew you to the idea of converting these three Activision classics?
It was Steven Day's idea. He had always wondered how some of Activision's greatest unconverted games would have looked on the Commodore 64, so one day he showed me some preliminary graphics and told me that Saul Cross would be on board for sound effects and music in case I fancied giving the conversions a try. Steven and Saul are legends in the industry and I jumped at the chance to do something with them.

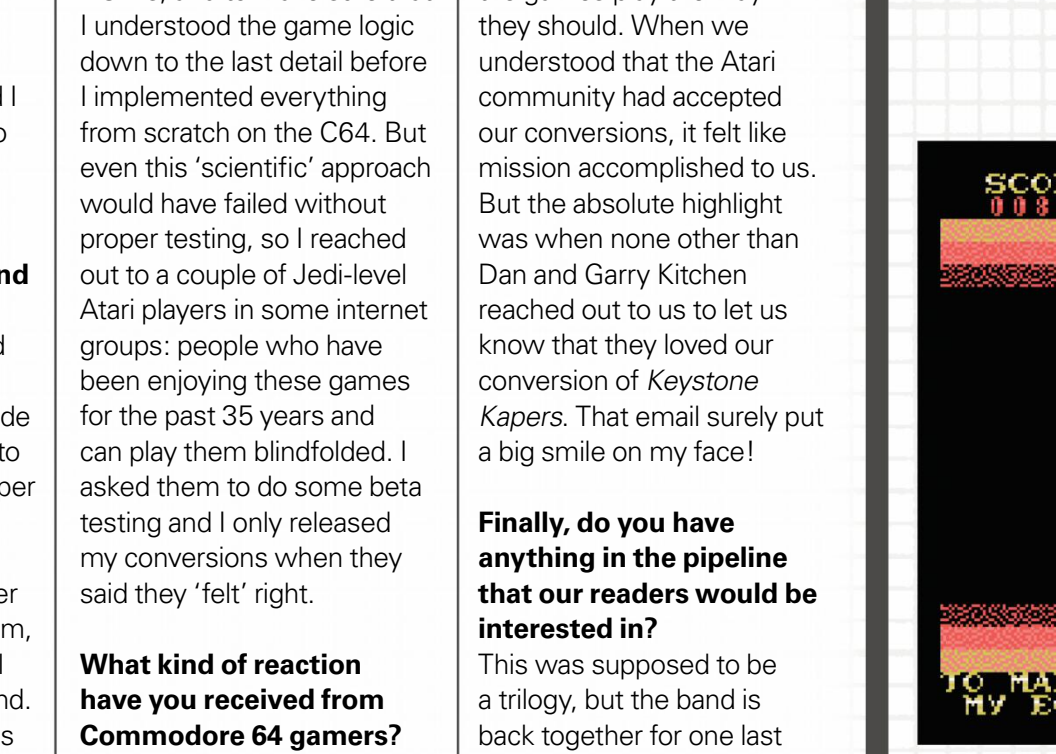
How long do ports like these take to produce, and who was involved?
Having all the graphical and musical assets ready (or done in parallel with the code development), it took four to six weeks of my free time per title, give or take, including the non-negligible effort required to reverse engineer the originals. As for the team, I did all the coding and Saul Cross took care of the sound. Steven Day did the graphics and set the pace with the whip: he'd call me every day and ask me, 'Is it done?'

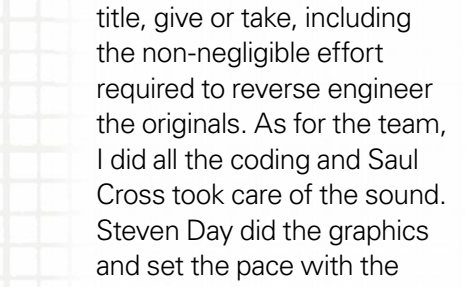
Just how difficult was it to get these titles playing like the Atari 2600 originals?
That was the most difficult part for sure. The thing is, these games are icons for the Atari fans and you don't want to upset them creating a conversion that, while looking and sounding better, plays differently. My approach was to disassemble and document the original ROMs, and to make sure that I understood the game logic down to the last detail before I implemented everything from scratch on the C64. But even this 'scientific' approach would have failed without proper testing, so I reached out to a couple of Jedi-level Atari players in some internet groups: people who have been enjoying these games for the past 35 years and can play them blindfolded. I asked them to do some beta testing and I only released my conversions when they said they 'felt' right.

What kind of reaction have you received from Commodore 64 gamers?
We got some great feedback! Some Atari fans showed screenshots of ridiculous scores obtained on their first attempt, thus praising the fact that the games play the way they should. When we understood that the Atari community had accepted our conversions, it felt like mission accomplished to us. But the absolute highlight was when none other than Dan and Garry Kitchen reached out to us to let us know that they loved our conversion of *Keystone Kapers*. That email surely put a big smile on my face!

Finally, do you have anything in the pipeline that our readers would be interested in?
This was supposed to be a trilogy, but the band is back together for one last conversion. So expect *Pressure Cooker* to be available sooner than later.







» [C64] It's early days in *Chopper Command* before things start getting busy.

» [Atari 5200] Time to make one of the enemies go kaboom!

ATARI TO ATARI

The Atari 5200 has just received a port of the excellent Atari 8-bit homebrew *Bosconian*, courtesy of developer Shanti77. For those unfamiliar with Midway's original game, the objective is to destroy the large green battle stations, either by chipping away at their defences or trying to safely line up a more difficult but rewarding shot straight into the reactor core. There's space mines, asteroids or waves of enemy attackers to avoid or destroy as well, and the call to battle stations is over at Atari Age's forum behind Kikstart.me.uk/bosconian-5200.

» [MSX] Here's previous MSXdev entry *Buddhagillie*, a shoot-'em-up with swords.

GETTING 2020 STARTED

The MSXdev is one of the longest serving 8-bit development competitions. Despite the recently introduced freestyle category being absent, the competition has opened its doors for 2020 with information for entrants and gamers alike being found at Kikstart.me.uk/msxdev-2020. The skipping of a year in the title was somewhat confusing, but this competition has always been a treasure trove of MSX releases and we're looking forward to seeing what the entries over the coming year will offer.

DO YOU REMEMBER?

When programmers go touting for work they produce small games to show their prowess. *Cash Crisis* on the Amiga was one such release, put together by a couple of developers in 1989 and based on Konami's arcade shooter classic *Scramble*.

As with the title it's based on, the idea is simply to blast and bomb through increasingly hostile scrolling landscapes while at the same time trying to keep the ship from colliding with the backgrounds, ground or air enemies and their explosions.

The controls are very twitchy and difficulty has been set very high, but some persistence and time spent learning how to control the ship should be enough for more hardcore shoot-'em-up fans who like a challenge to get some fun out of the wanton destruction. Kikstart.me.uk/cash-crisis-amiga will take you there.

» [Amiga] Sometimes the enemy rockets line up like fish in a barrel.

» [Amiga] On other occasions the landscape does a good job of blocking missiles.

» [C64] The ice is starting to get a little fragile in *Frostbite*.

ACTIVISION TRILOGY

» **PLATFORM:** COMMODORE 64 » **DEVELOPER:** ANTONIO SAVONA » **DOWNLOAD:** KIKSTART.ME.UK/AS-CSDB » **PRICE:** FREE DOWNLOAD

They might have been released as single games over the space of three months, but the developers behind the conversions of Activision titles *Chopper Command, Keystone Kapers* and *Frostbite* to the C64 saw them as a trilogy so we're going to look at them in that way as well. *Chopper Command* hands the player control of a combat helicopter tasked with defending a convoy of trucks from aerial bombardment, basically by blasting every other craft in the sky to pieces as quickly as possible. Each mission is harder than the previous one – the enemy planes and choppers become more agitated and are therefore harder to shoot – additionally, learning the controls is vital to long-term success.

Keystone Kapers is probably the most famous of the three games here and sees the hapless Officer Kelly trying to keep the nefarious Harry Hooligan from robbing the prestigious Southwick's department store. That means a race against the clock, chasing Harry through the building – he always gets a significant head start – while avoiding hazards including toy biplanes, bouncy balls or roving shopping carts which slow Kelly down.

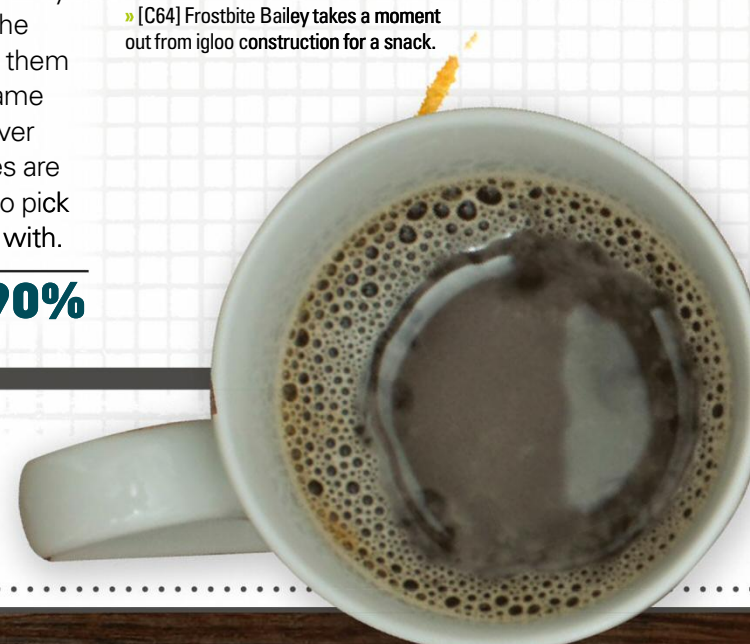
The final and most recent entry in the trilogy is *Frostbite*, where *Frostbite* Bailey needs to build himself a igloo before the temperature drops too far. Simply jumping between the floating ice rafts as they pass his icy construction site will gather the required bricks and fish can be collected for a quick snack, but there are also creatures in the water to steer clear of, gaps in the ice flows and a grumpy polar bear which appears to chase Bailey by the river as the game progresses.

The original versions of these three games are all Atari 2600 classics but, although they've each received a very nice audiovisual revamp during the conversion process, what made them great to start with is the great game design and that's been carried over to the C64. None of these games are going to be easy for a beginner to pick up, but they're all worth sticking with.

» [C64] Things are warming up in *Keystone Kapers* – is this what's meant by 'hot pursuit'?

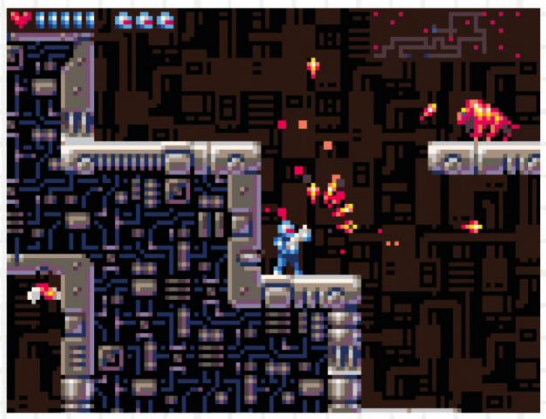
» [C64] Frostbite Bailey takes a moment out from igloo construction for a snack.

>> Score **90%**



X-ZERO

» **PLATFORM:** PICO-8 » **DEVELOPER:** PARANOID CACTUS
» **DL:** KIKSTART.ME.UK/X-ZERO-PICO8 » **PRICE:** FREE



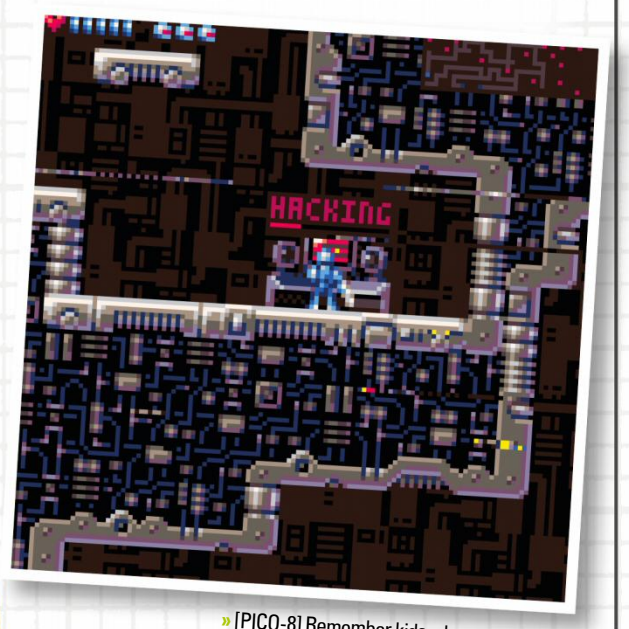
» [PICO-8] Using the aiming feature to take down the airborne enemies.

The sci-fi world of *X-Zero* is a pretty simple one. Each stage has a series of computer consoles which must be hacked in order to unlock the final battle, but there are also ridiculous numbers of flying and patrolling enemies getting in the way – shoot or die, basically.

Fortunately, the player can take a couple of bumps between losing lives and their weapon power and health can be restored by icons that are left behind by downed enemies. It also helps that the weaponry can be aimed at diagonals using the up and down controls, something that proves useful when encountering otherwise out-of-range nasties.

There's something of a *Turrican* vibe here and, although everything has been pared down for the PICO-8, it does still have that claustrophobic feeling so even when the guns are fully charged it's often better to proceed cautiously to see what's lurking around the next corner.

» Score **86%**



» [PICO-8] Remember kids, always clear your surroundings before attempting a hack.

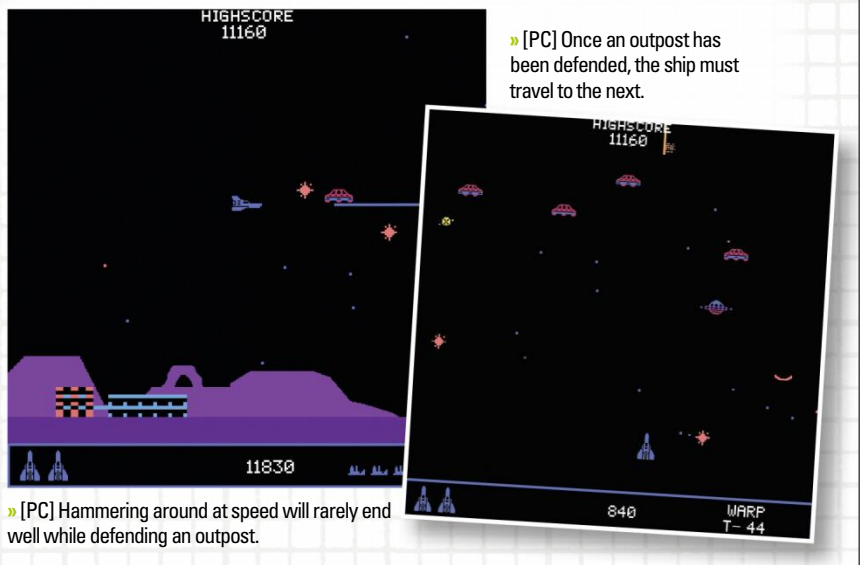
STARFIGHTER 77

» **PLATFORM:** PC » **DEVELOPER:** DYLAN PAPP » **PRICE:** NAME YOUR OWN PRICE » **DOWNLOAD:** KIKSTART.ME.UK/STARFIGHTER-77-WIN

Taking inspiration from elements in assorted coin-ops of the Seventies and Eighties, *Starfighter 77* is a simple but rather interesting shooter. The levels are divided into phases, so the player goes from defending a scrolling outpost and its buildings from invaders to zooming through space while charging up power in the warp drive and each loop ends with a chance to blast chains of enemies in a challenge stage.

There's nothing that fans of the genre haven't seen before of course, but the developer was going for a proper old school feel for both gameplay and the cosmetic details. This pays off for the most part although sound is sparse and there's a few difficulty balancing issues – the first stage of three does feel trickier than the others, mostly because it's harder to see what's coming – but it does slot together into a fun blaster.

» Score **82%**



» [PC] Once an outpost has been defended, the ship must travel to the next.

» [PC] Hammering around at speed will rarely end well while defending an outpost.

» [Atari 2600] Downed enemies become obstructions in *Robot City Reloaded*.

ROUNDUP

Atari 2600 homebrewing legend Thomas Jentzsch has recently been working on *Robot City Reloaded*, a maze-based action game where the player is pursued by relentless machines with only one weakness: they can be blasted from behind. Sneak up upon Kikstart.me.uk/rcr-2600 for more information about the development and some beta tests of the code itself.

Staying with Atari, but moving over to the 8-bit computers, a port of *Monty On The Run* was recently released by the atariBDSM team. Along with a rendition of Rob Hubbard's classic C64 soundtrack, this was actually ported from the version on the Commodore 16, meaning that would-be absconders don't have to worry about selecting escape kit items before setting off. Atarians who fancy a break in the sun can jog on over to Kikstart.me.uk/motr-a8.

ASSEMBLOIDS

» **PLATFORM:** ATARI LYNX » **DEVELOPER:** PRIORART
» **DOWNLOAD:** KIKSTART.ME.UK/ASSEMBLOIDS-LYNX » **PRICE:** FREE

The phrase 'robot assembly' usually has people thinking of an automated production line surrounded by machines, but that isn't true for *Assembloids*. Instead, the player is charged with rapidly putting together brightly coloured and distinctive robot faces from pieces as they appear in the centre of the screen.

The directions on the d-pad push robotic elements into one of four bins which are emptied when a face is completed, with points being awarded based on how many of the parts used are matching. There's also a strict timer to worry about, though, so there isn't much time to pause for thought.

Action puzzlers like *Assembloids* are great for a quick burst of gaming on the move, so putting a Lynx version out really makes sense. The graphics look great with the faces easily distinguishable from each other and the fast-paced action has translated very well to Atari's handheld.

» Score **88%**

» [Lynx] Eyeing up various places to store a lizard-like robot face.

» [Lynx] Using the same coloured components in one face is worth a bonus.

BOB WAKELIN ARTWORK
"I'm lucky enough to own around 25 to 30 pieces of Bob's artwork, all signed, which proudly hang on the walls."
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JETPAC
"My first ZX Spectrum game, bought in 1982 from WHSmith in Ilford High Road."
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GARAGE OF GAMES

Our first collector of 2020 takes us inside his heavenly collection

When we first arrive outside this unassuming residence in deepest Essex, there's little indication of the retro love that awaits inside. Its owner is Paul Martin, a videogame fan since the late Seventies, and his collection has grown to such a size that Paul's abode can no longer contain his vast and impressive selection of hardware and games – the large majority of which are boxed and in mint condition. "We were going to go for a simple and standard garage conversion," begins this month's collector, "then my friend Ben – a local builder from Team England – and I got going, and it got a bit out of hand, turning into a retro-gym-bar-party-room!" After perusing the contents of Paul's main house – a wall of complete Sega Dreamcast and Nintendo 64 games (all boxed), and a wooden display cabinet full of mint Sega Saturn and Game Boy games – it's clear that he did indeed require more room for his collection. "Finishing the garage took about three months," he tells us, "but there were a lot of meetings over a few beers each night as the plans changed – 'daily debriefing' we called it!"

The result of these spirituous meetings is impressive. There are two arcade machines and retro items everywhere. Yet we are most wide-eyed at the vast array of stunning artwork that adorns the walls, notably the efforts of Oli Frey, and the late Bob Wakelin. "I feel extremely honoured and proud to have so much of Bob's artwork – signed by himself – on the walls," says Paul. "I adore his and Oli's work, and if I had more room, I would buy more of them. I shall be eternally grateful to Anna, of Attic Bug fame, who trusted me with her collection."

As you enter Paul's converted garage, to the right sits a row of his current favourite consoles and computers, including a Mark One Mega Drive and Mega-CD, Super Nintendo and N64, Sega Saturn and Dreamcast, the latter displaying *House Of The Dead 2*, for which Paul has recently acquired an official Sega lightgun. To the left of this legendary collection is a fully stocked bar, with a bespoke game storage unit tucked away underneath. "It's a wonderful party room where we can have fun as a family, and have also had some incredible parties with friends," grins Paul. "But that said, it's also where I can still go and relive a small piece of my childhood using the consoles and games that I have collected over the past 40 years.

That collection began back in the late Seventies with Paul's first console love, the Atari 2600. "I still have over 300 boxed Atari 2600 and 7800 games," he explains, "which sadly are currently all in storage, along with loads of Commodore 64 and Spectrum tapes and disks."

With the garage complete, maybe it's time for an extension; but in the meantime, we can't help poring over that amazing wall art once more. "It's some truly incredible artwork from both men, and any retro room should have a piece of their work in, especially Commodore and Spectrum collectors." We cannot help but agree. ✱

BIO

NAME:
Paul Martin

LOCATION:
Essex

FAVOURITE CONSOLE:
Atari 2600

TWITTER:
@Underwulde123

BOXED VECTREX
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JEWEL IN THE CROWN

MAGAZINE COLLECTIONS

■ "They're what I enjoy the most – bought and sold over the years to get the best conditioned collection money can buy."

PAID: APPROX £400 (NOT INCLUDING RETRO GAMER)

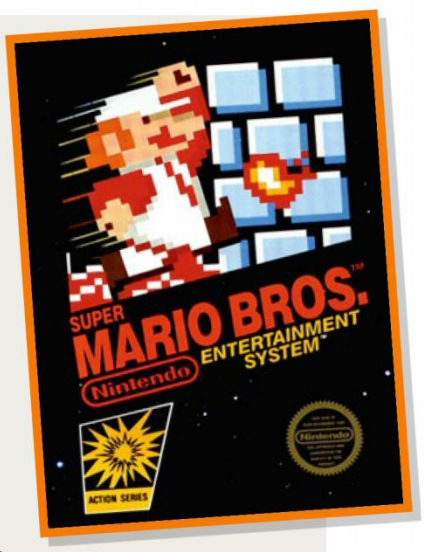
BARGAIN HUNT

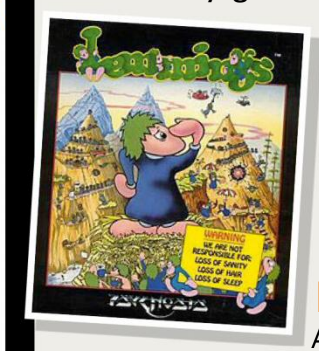
Your guide to the rising world of retro prices

THE COVER STAR

SUPER MARIO BROS

The ubiquity of *Mario* games, reflected in their inclusion as pack-in titles on many occasions, means this famous series maintains a relatively low price. While boxed prices can on occasion get a little silly, cart-only auctions for the first three games on the NES frequently clock in at under **£15**. The ongoing popularity of the moustached plumber ensures a copy rarely goes unsold, however.



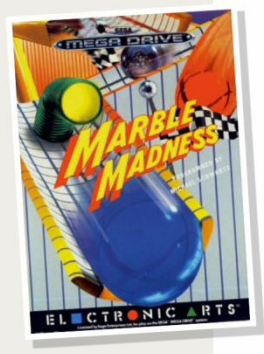


LEMMINGS

A big seller for the Commodore Amiga, it's not hard to source a boxed copy of *Lemmings* for around **£10-£15** depending on condition. The CD32 version is rarer, usually posting at at least double that price.

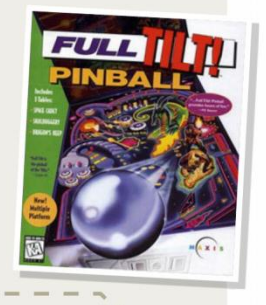
MARBLE MADNESS

Another common game that's unlikely to break the bank, with the Spectrum version by Melbourne House particularly cheap, and a bundle staple. A boxed copy of one of the best versions, on the Sega Mega Drive, is unlikely to set you back more than a **£10**. Trackball not included!



NUCLEAR STRIKE

The N64 version of *Nuclear Strike* is the one to watch here. With almost every other game from the series on every system selling cheaply, a boxed N64 copy of the final game is likely to set you back at least **£50**.



FULL TILT PINBALL

Boxed copies of this frantic and enjoyable pinball simulator tend to sell for under **£20**. It's difficult to source this side of the pond, however, making postage an issue to consider.

HOW MUCH?!

STREET FIGHTER ALPHA 2

This tremendous fighting game regularly fetches over £100. However, an auction from November last year caught our eye, going for an eye-watering Buy It Now price of **£220** on eBay.

Prices correct at time of print

MAILBAG

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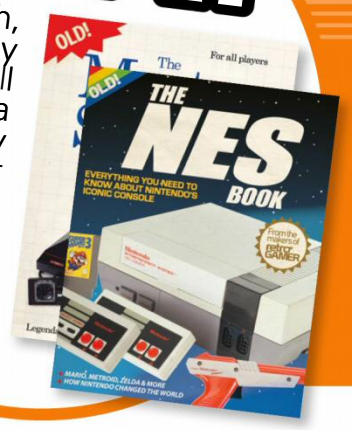


STAR LETTER

LITTLE SHOP OF RETRO

Dear **Retro Gamer**,

I would like to thank Darran and the team. I've run a family videogame shop for almost 30 years and I religiously read your mag every month. I've been with you from the start, and after I finish the latest edition I leave them around my shop for customers to enjoy and gain inspiration. I love the fact my favourite ever game is *Strider* and my favourite console is the Mega Drive just like your editor!

Thanks guys, and may your amazing work continue for years to come.

Martin Miers, Swansea

We're glad you're enjoying the magazine, and your shop looks amazing. You also have impeccable taste in games. We'll have to stop by and have a browse the next time we're in Swansea. We hope you enjoy your retro book.

» Martin clearly has great taste in games, consoles… and magazines.

» [ZX Spectrum] Dave was one of many readers who really loved the *Jet Set Willy* feature in issue 201.

MATT MAGIC

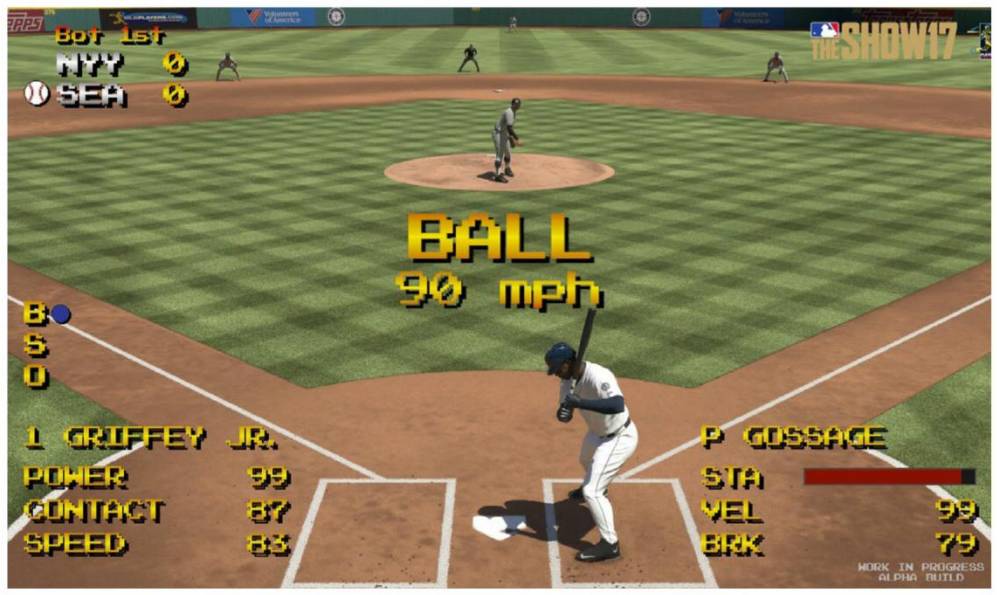
Dear **Retro Gamer**,

Issue 201 was absolutely brilliant. The Matthew Smith breakdown of *Jet Set Willy* was hilarious and informative in equal measure. What a genius that fella is. I laughed at how he honestly explained screens where he couldn't be arsed and left them half-finished etc. It was refreshing to read someone being brutally honest about the game and what goes through a programmer's mind. Matthew is a one-off and a typical genius or mad man. Is there a difference?

Could I make a suggestion, if possible? How about listing a handful of retro gaming websites that people may not be aware of, such as Retrospec and JSW Central that have been mentioned. I probably speak for many retro gamers when I say I was totally unaware of these sites until recently and have really enjoyed downloading and playing their content. Maybe readers could suggest decent sites to visit? Who knows, it's just an idea.

Anyway, keep up the good work. It is really appreciated.

Dave McNally



» [PS4] Darran's been known to play the odd baseball game, so maybe we can rustle up some sort of feature.

Glad you loved the *Jet Set Willy* feature, Dave. Matt always has interesting things to say whenever we interview him. With regards to mentioning special websites, it's certainly something we can look into for the future.

BASEBALL BLUES

Hi **Retro Gamer**,

I realise I'm late to the party but I think it would be interesting to do an article on *RBI Baseball* for the NES. I still play it to this day and it was one of my favourite games. It would be interesting to read why it was released twice by Tengen and the fact that *Super Batter Up* for the SNES (another great game I'm currently obsessed with) has the same iconic music in the game. I was blown away when I discovered (by accident) the *Super Batter Up* fact. I just randomly played it one day.

Keep up the amazing work!

Matt Kenney

Glad you're enjoying the magazine, Matt. As a UK-based magazine we're not too hot on the world of baseball. Darran does enjoy the occasional game in the *MLB* series, so maybe we can get him to do a little investigating and put a baseball-themed article together.

NO MINI FOR ME

Dear **Retro Gamer**,

As much as I enjoyed reading the magazine issue featuring the Sega Mega Drive Mini it will have to be a strong nay from me. Despite its advertised improvements over the shoddy AtGames products, it's missing an important feature for old-school diehards like me and that's the ability to play the old cartridges on it since the bulk of its games are what I have already played. It's a shame it doesn't include *Cannon Fodder*, *G-Loc*, *Doom*

» Sega's mini system has done nothing for Robert Smith. He'd rather have an Evercade.

CONTACT US

Snail Mail: Retro Gamer, Future Publishing, Richmond House, 33 Richmond Hill, Bournemouth, Dorset, BH2 6EZ

Email: retrogamer@futurenet.com

Squad, Mortal Kombat, Chaos Engine and so on. Hence the fact I'm going for the Evercade handheld, just for being original and new as opposed to rehashing an old idea to sell upon the masses in the retro market where nostalgia is strong.
Robert Smith

You're missing out on the Mega Drive Mini, as it's a great piece of kit. Having said that, you'll probably have enjoyed the interview with the Evercade creators which we ran in issue 201. We'll hopefully review it later this year.

SAVE OUR SIMIANS

Hi there,
I'm Carl Eggett from the Twitter page @fortheloveoflucasarts. We are trying to return *Monkey Island* to its rightful owner (Ron Gilbert). Would you mind signing our petition to help the classic point-and-click adventure *Monkey Island* return to its rightful owner and away from the clutches of Disney! You can sign at http://chng.it/LTfyLMjQ8m so please help us spread the word.
Thank you!
Stuart Hardy

Consider it done, Carl, and good luck with your petition.

» [Amiga] Will Disney ever make a *Monkey Island* game? Carl doesn't think so.

UNLEASH THE SHARK!

Dear **Retro Gamer**,
Please, please, please can you run an article on *Jaws Unleashed*. I discovered it on the Xbox a few years ago and recently found time to play it. It's absolutely hilarious and is one of the silliest games that I have ever played. You can unlock security doors by grabbing scientists, knock riders off jet skis, blow up oil rigs by throwing canisters at them and all other sorts of nonsense. I realise the game is by the creators of *Ecco The Dolphin*, but I would love to know why they thought it would be a great idea to make a videogame out of a movie that had come out 31 years previously.
John Jacobs

DISCUSSED THIS MONTH

Darran In Exile

Tragedy struck our poor editor on the first working day of 2020, as he came into the *RG* office to find his work computer had gone to the great big motherboard in the sky. He was forced to use the spare computer that exists in the far-away bookazines department, all the way across the office. While Darran grumbled about his predicament to his colleagues via email, Drew and Andy enjoyed the quietest deadline *Retro Gamer* has ever seen. Nick, meanwhile, was enjoying his extended time off… probably murdering people on *Tetris 99*.

We're glad you're enjoying *Jaws Unleashed*. Darran has decided he's going to try and sort out a Making Of for a future issue. He's resorted to scanning the internet for leads while humming the theme tune.

» [Xbox] Few other videogames allow you to systematically strip a killer whale.

Your say

Every month, Retro Gamer asks a question on social media and prints the best replies. This month we wanted to know…

What's your favourite 2D Mario moment?

» [SNES] *Super Mario World* has plenty of memories for readers.

Darren Millburn
Playing the original *Mario Bros* with my ten-year-old daughter at Arcade Club in Bury is always the highlight on every visit there. Watching her laughing uncontrollably as we accidentally jump into each other, sending one of us to our doom, is as much fun now as it was 35 years ago. The fact she loves it just as much as any modern title is testament to the simple yet brilliant gameplay, and it will always remain my favourite two-player arcade game.

Adam Jones
That first time you find Yoshi. Your eyes lit up with joy and you hopped onto his back, and even the music changed a little with this wonderful little addition.

@ShiryuGL
Completing all levels in *Super Mario World* and watching the end. Nothing was ever the same again.

RetroBob
The ending of *Super Mario Land* was great, two hectic battles followed by such uplifting music when the credits roll!

@geeknumber1
Making a stage in *Mario Maker* for the first time, and laughing as my daughter played it.

@playedinjapanuk
That Christmas my cousins brought their new NES/*Super Mario Bros* around on Boxing Day… I was so, so jealous.

@oddpodretro
Secretly playing *Super Mario Land 2* on my Game Boy with the lamp on late on a school night.

Rick Lindeman
The submarine in *Super Mario Land*. Freedom!

Graham Plowman
Discovering the Ghost House alternate path leading to the Star World for the first time. This was back when there was usually no idea such secrets existed and you simply had to discover them. I usually avoided cheats in the games magazines.

@aalukeyboy
My son, then age five, biting the screen of his DS in a fit of rage as Mario takes another fatal fall.

Alexander Leonard Kinch
Mario land 2. When I first played it my mind was blown by the size of the game on a handheld. For me it did more for the Game Boy than *Mario World* did for the SNES!

retro GAMER

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Printed by
William Gibbons & Sons Ltd, 26 Planetary Road, Willenhall, WV13 3XT

Distributed by Marketforce, 5 Churchill Place, Canary Wharf, London, E14 5HU www.marketforce.co.uk Tel: 0203 787 9060

ISSN 1742-3155

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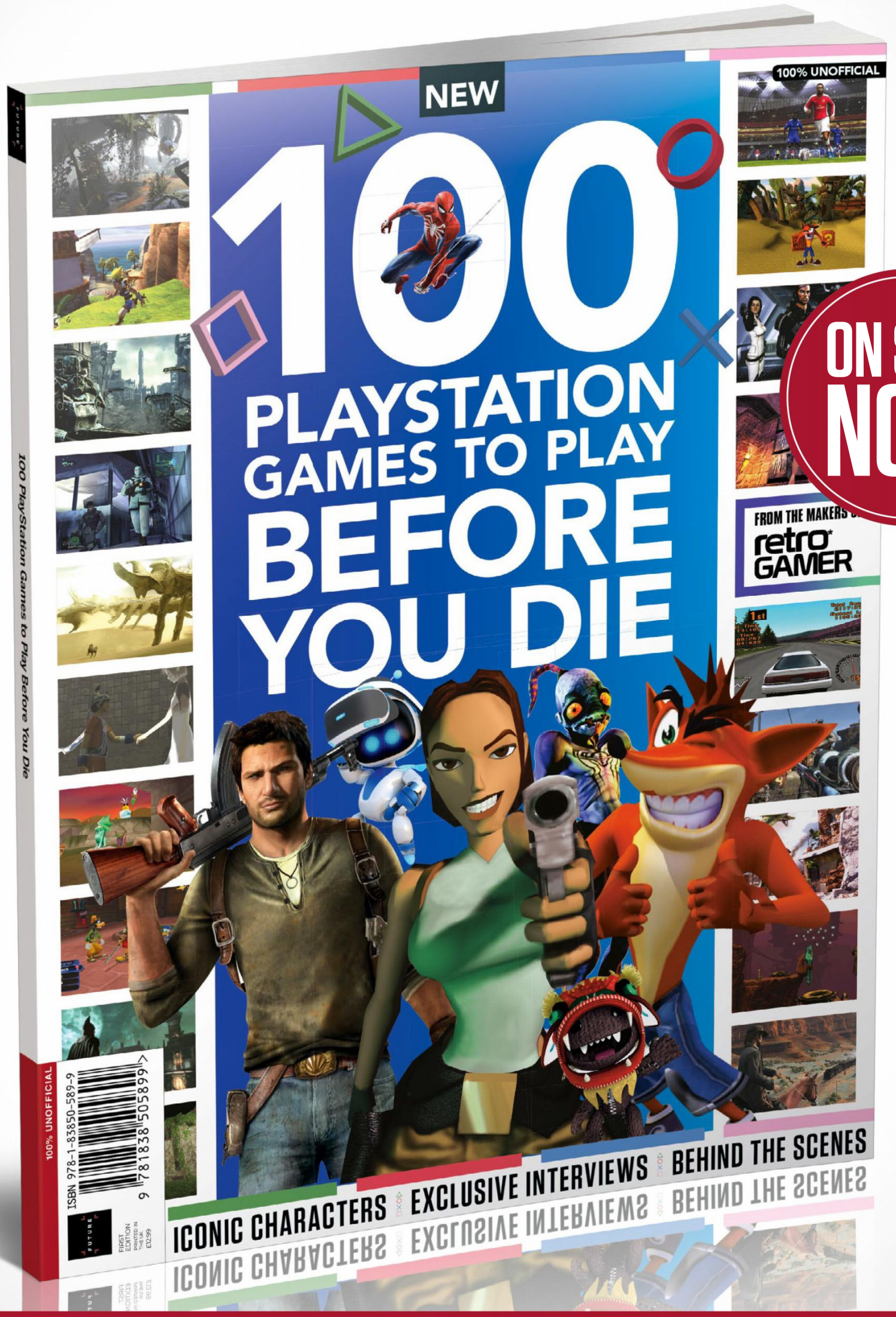

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LAST BRONX: RED EYE'S ENDING

» Tokyo has been overrun by street gangs, and they're all out to prove one thing – that their leader could beat up the other leaders. Yes indeed, it's playground warfare but this time around everyone's running around with dangerous hammers and nunchaku. You have chosen to take the role of Red Eye because he wears cool goggles. How will he get on in this clash of the criminals? Let's find out...

01

» Look at poor, defenceless Yoko, crumpled on the floor after a crushing defeat. Sure, she's in a whole bunch of physical pain, but the knowledge that Red Eye is none other than her beloved brother Ken hurts far more deeply.

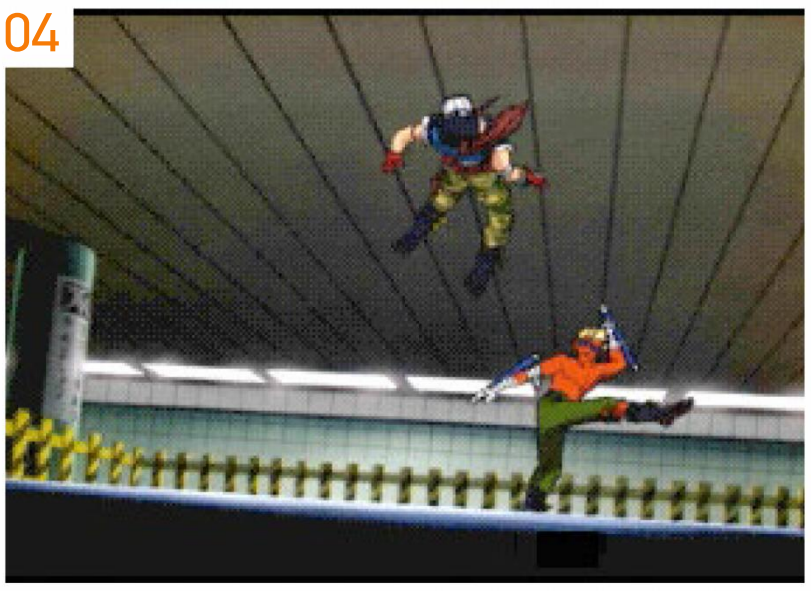
02

» Ken revels in his new powers, satisfied that they will allow him to achieve his goals as an agent of the Redrum organisation. His victory over his little sister, one of the toughest gang leaders in Tokyo, is proof of that.

03

» But this isn't any old power! Oh no, Red Eye is only interested in one kind of power – the power of evil. We probably should have guessed from the wild blonde hair and absurd tan, really. We feel pretty silly.

04

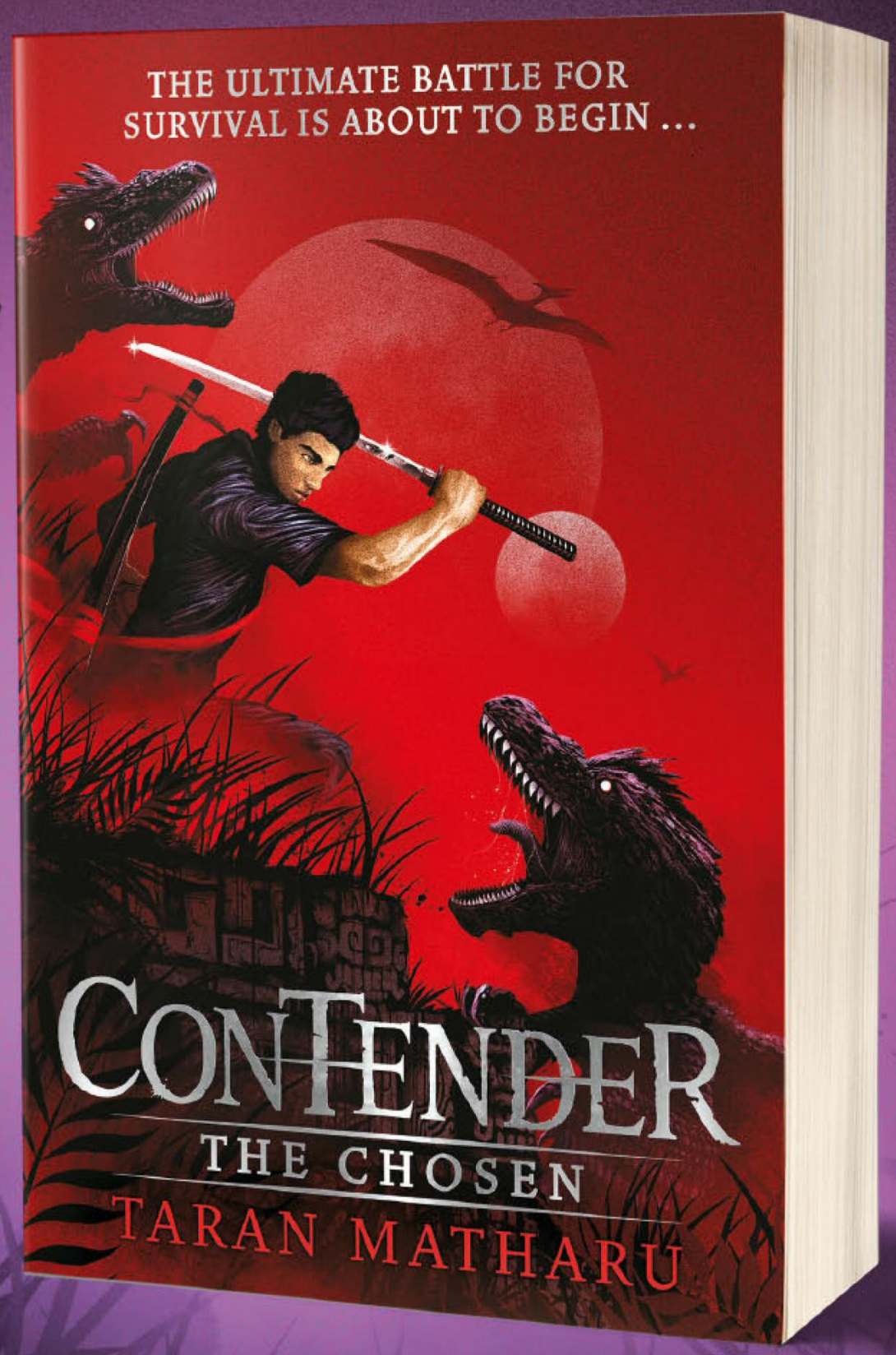


» But where does he go from here? Well, holding the power of evil as he does, Red Eye decides to indulge in the powerful evil man's favourite pastime – attacking the vulnerable. With that in mind, he turns back to poor old Yoko and kicks his sister square into next week.

05

» As Yoko lands in a crumpled heap, Red Eye decides to cap off his latest act of pointless cruelty in style, with a traditional villainous laugh. What a dick. Honestly, if human society has one flaw, it's letting evil guys with wild blonde hair get what they want. When will we learn?

AN EPIC NEW TRILOGY



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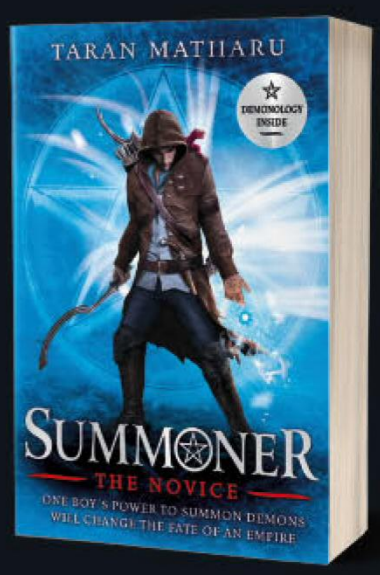

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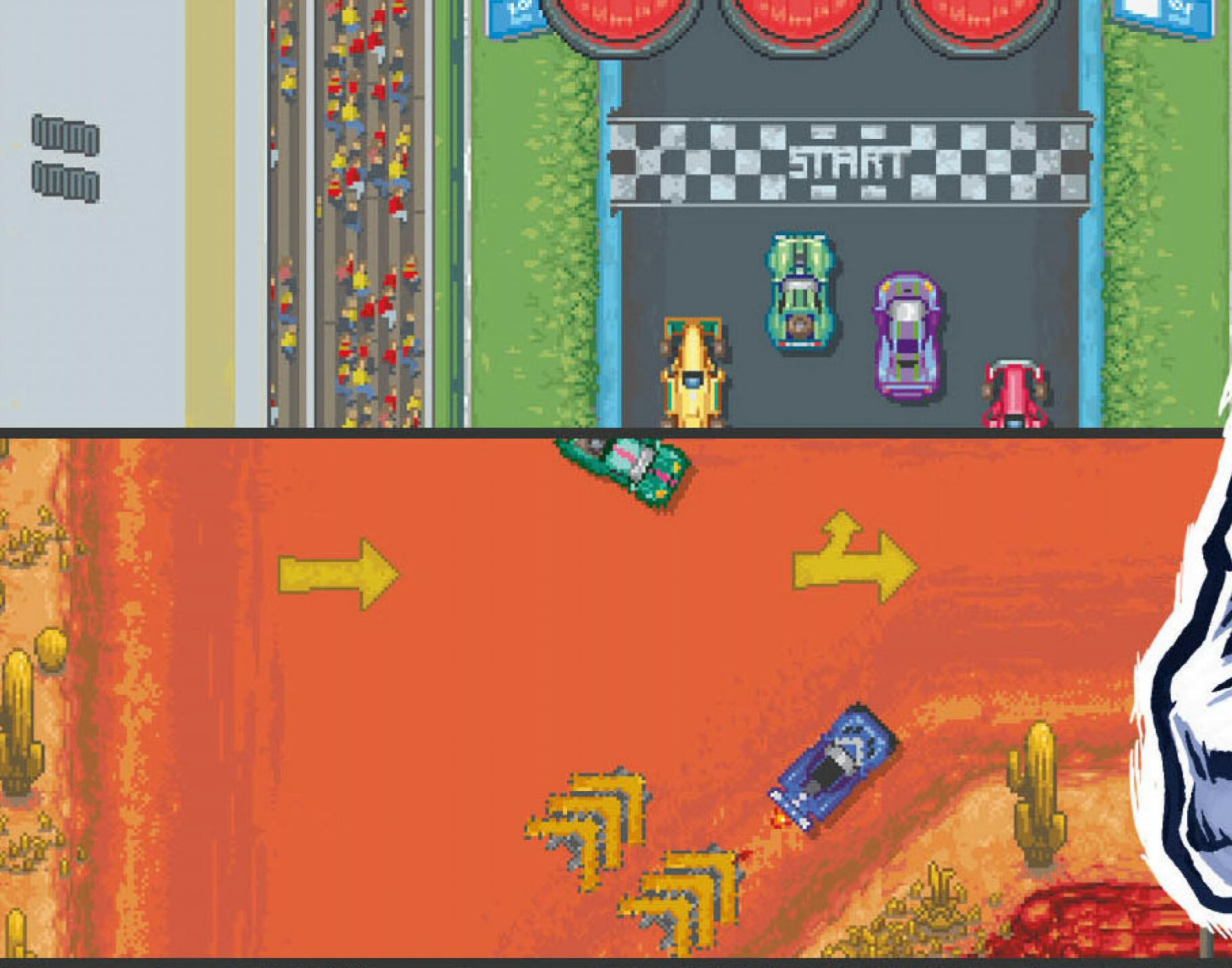

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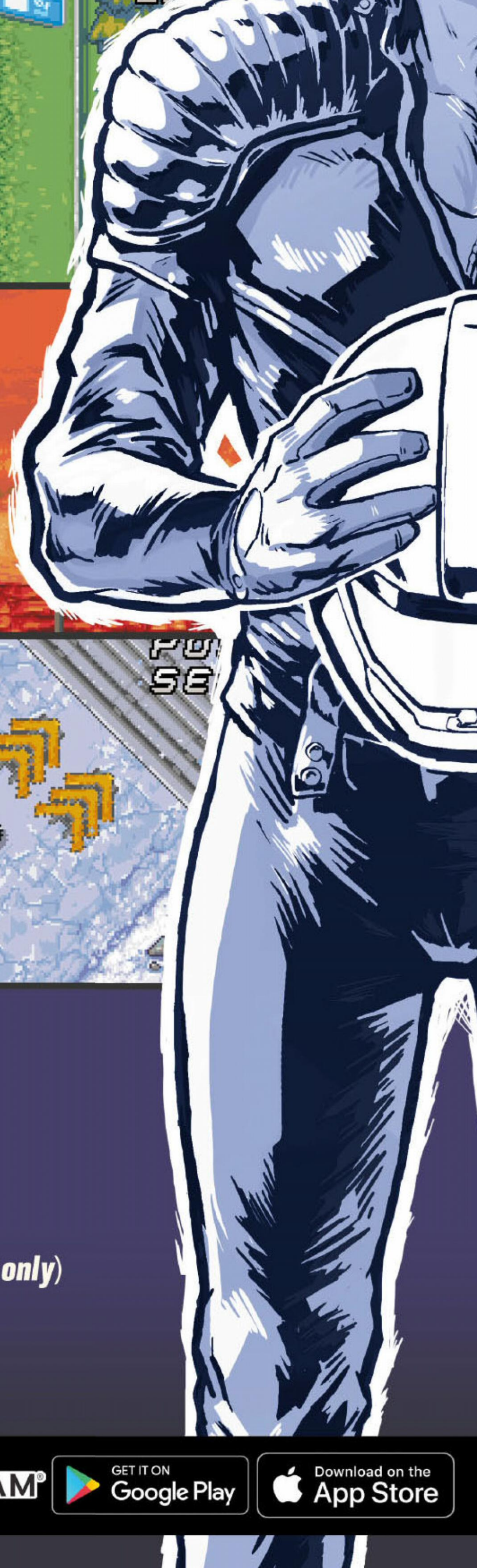

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